THE PUBLIC INTEREST ENERGY RESEARCH (PIER) PROGRAM, ENVIRONMENTALLY PREFERRED ADVANCED GENERATION (EPAG)

REQUEST FOR PROPOSALS

RFP #500-00-509

For

Research, Development, and Demonstration Projects Focused on Fuel Cells, Micro and Small Turbines, Fuel Cell/Turbine Hybrid Systems, Balance of Plant Subsystems, and Related Technologies



State of California California Energy Commission April 4, 2001 Questions or clarifications about this RFP should be directed to:

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This RFP is available on the following Web Sites:

Energy Commission <u>energy.ca.gov/contracts</u>
California State Contracts Register <u>dgs.ca.gov/osmb/cscr</u>

Copies may be obtained by writing or calling:

California Energy Commission 1516 Ninth Street, MS-18 Sacramento, California 95814 Telephone: (916) 654-4788 FAX: (916) 654-4423

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1. How Is This RFP Organized?

This Request for Proposal (RFP) is organized into the following sections:

Section I Introduction

Section II Proposal Format and Required Documents

Section III Evaluation Process and Criteria Section IV Administrative Information

Section V Proposal Forms

2. How Was the Public Interest Energy Research (PIER) Program Developed?

In 1996, then Governor Pete Wilson signed into law Assembly Bill (AB) 1890 (1996 California Statutes, Chapter 854), which provided authority for a restructuring of California's electric services industry. Among other things, AB 1890 added Section 381 to the Public Utilities Code, requiring that at least \$62.5° million be collected annually from investor-owned electric utility ratepayers for public interest energy research development and demonstration (RD&D) efforts not adequately provided by competitive and regulated markets. Of this amount, the California Energy Commission (Commission) administers \$61.8° million per year through the PIER program.

Following a lengthy, statewide collaborative effort, the Commission adopted its *Strategic Plan for Implementing the RD&D Provisions of AB 1890* (Commission Publication No. P500-97-007, June 1997). The Commission s RD&D Strategic Plan identified the overall mission of the PIER program as follows:

The mission of the Public Interest Energy Research program is to conduct public interest energy research that seeks to improve the quality of life for California's citizens by providing environmentally sound, safe, reliable and affordable energy services and products. Public interest energy research includes the full range of research, development and demonstration activities that will advance science or technology not adequately provided by competitive and regulated markets.

The Commission has prepared the *Five-Year Investment Plan, 2002 Through 2006*, (Ref.: http://www.energy.ca.gov/research) to present the PIER program s strategic approach for addressing California s future energy needs. The strategies will lead to solutions developed through research, development and demonstration (RD&D) projects to increase electricity supply, reduce demand, lower peak demand, improve reliability and power quality, improve the operation of the market, and protect and enhance the environment. The PIER Program's strategic approach will help to alleviate or avoid California's energy problems, such as those impacting the state today.

3. What is the Purpose of This Request for Proposals (RFP)?

The Commission is issuing this Request for Proposals (RFP) to select a Contractors to conduct RD&D projects under the Environmentally Preferred Advanced Generation (EPAG) area of the PIER Program.

Proposals are being solicited to accelerate and extend research, development, demonstration and testing of promising technologies for microturbine, small turbine, fuel cell, and fuel cell/turbine hybrid systems, and components. Proposed projects should do one or more of the following: lower capital cost, installation cost, and/or operation and maintenance cost; improve fuel-to-electricity conversion efficiency; meet or exceed California atmospheric emissions requirements; have other desirable environmental attributes; enhance reliability, durability and maintainability; have multi-fuel use capabilities; support integration of distributed generation and on-site generation with the power grid; and in general, lead to the adoption and use of the improved EPAG technologies within California.

There are predictions that as much as 20 percent of new electricity generation capacity through the year 2020 will be in the form of distributed on-site generation. The Commission desires that these installations provide economic, environmental, efficiency, reliability and power quality benefits that equal and exceed those provided by the utility grid system linked to centralized generation. At their present levels of development, fuel cells and micro and small turbines do not provide clear superiority over new natural gas-fired combined cycle power plants. Technical improvements and improved scientific understanding are required to bring the promise of EPAG technologies to fruition.

The EPAG technologies that are the focus of this RFP give electricity end-users new options to provide on-site supply of electricity as an alternative to, or in parallel with, conventional utility grid electricity. The deployment of EPAG technologies will provide greater flexibility and control in the delivery of electricity, heat, and shaft power to industrial, commercial and residential operations.

4. Is there a Scope of Acceptable Projects?

This solicitation is open to a wide spectrum of projects that may range from fundamental materials science studies or manufacturing process development, to pre-commercial demonstrations related to fuel cell, microturbine, small turbine and fuel cell/turbine hybrid systems, system integration and component development.

Proposals for RD&D projects to advance science and technology are desired in the areas listed below:

- 1. Planar Solid Oxide Fuel Cells operating at or below 650°C (See Table 1 below.)
 - Innovative stack concepts, materials, and fabrication methods
 - 10-100 kW size systems. Proposals should discuss impact of thermal losses on technical viability.
 - Demonstration of stack integrity over time
 - Reliable seals between stack and piping
 - Multiple fuel capability.
- 2. Molten Carbonate Fuel Cells (See Table 2 below.)
 - Higher power density
 - Demonstration of thermal cycling capability
 - Cogeneration capability and applications
 - Pressurized operation
 - System demonstrations that are designed to rigorously test robustness, maintainability, stack lifetime, thermal cycling, and flexibility in operation. Results from any demonstration must be made publicly available.
 - Multiple fuel capability.
- 3. Proton Exchange Membrane Fuel Cells (See Table 3 below.)
 - Transfer of advances made for vehicular applications to stationary applications
 - System demonstrations for operation on natural gas and/or propane that are designed to rigorously test robustness, maintainability, stack lifetime, and flexibility in operation. Results from any demonstration must be made publicly available. Any demonstration for a commercial building should address the relationship to, and integration with, the DOE Fuel Cells for Buildings Program (see www.pnl.gov/fuelcells/buildingprog.html).
- 4. Micro and Small Turbines (See Table 4 below.)
 - System modeling and simulation
 - Simple cycle
 - Combined heat and power (CHP)
 - Hybrids
 - Advanced materials and manufacturing
 - Recuperator and other heat transfer devices
 - Variable- and multi-fuel capability
 - Ultra-low NOx combustion
 - Improved aerodynamics in compressor and power turbine
 - Fuel gas compression
 - Advanced sensors and controls.

- 5. Turbine/Fuel Cell Hybrids
 - Resolution of thermal and gas flow integration issues
 - System demonstration for grid-connected operation of properly sized fuel cell and turbine.
- 6. Regenerative fuel cell system demonstrations for energy storage and/or peak shaving
 - High round trip efficiency
 - Large number of duty cycles
 - Quantification of economics.
- 7. Reformers and other hydrogen production technologies suitable for EPAG technologies.
- 8. Power Conditioner Units (PCUs) based on innovative concepts with potential for extremely low cost, high power quality, and high reliability. The concepts should be applicable to fuel cells, turbines, wind electricity generators and photovoltaics.

Proposals outside the above areas will be accepted. However, Bidders proposing such projects are expected to explain how the subject area of their proposal follows a critical path leading to the market penetration of EPAG technologies. Such proposals should be superior in their response to the requirements of Volume 2, Technical and Cost Sections, especially with respect to the following:

- Problem statement
- Description of the scientific and technological baseline
- Technical approach
- Benefits of successful completion of the proposed project
- Need for PIER funding.

5. Are there Objectives, Targets and Stretch Goals for the EPAG Program?

In funding RD&D activities, the EPAG section of the PIER Program is seeking to advance the technical and market status of EPAG technologies so that installed systems achieve the following specific objectives:

- A cost of electricity that is competitive with grid-supplied electrical energy
- Low adverse environmental impact, especially low atmospheric emissions
- High reliability, availability, maintainability, durability, and usability
- Market connection.

Implied objectives include:

- High fuel-to-electricity conversion efficiency (both First and Second Laws of Thermodynamics) in order to reduce the fuel cost component of electricity, global warming impacts, and the risk of fuel cost escalation
- Fuel flexibility
- Dispatchability.

In view of the above EPAG objectives and the status of EPAG technologies, for the purposes of this RFP, the following Targets and Stretch Goals have been formulated. Note that the EPAG Targets and Stretch Goals are quantitative.

| Table 1. Performance Targets and Stretch Goals for Solicitation | | | | |
|---|------------------|--------------------|--|--|
| Solid Oxide Fuel Cell System | | | | |
| Parameter | Target | Stretch Goal | Notes | |
| Capital Cost, Installed | 800 | 400 | For year 2005 / 2010 | |
| (\$/kW) | | | at 50,000 units per year | |
| Power Degradation | <1% per 1,000 hr | <0.6% per 1,000 hr | For year 2005 / 2010 | |
| Power Density (mW/cm ²) | 300 | 500 | >4 cell stack, >25 cm ² electrode | |

| Table 2. Performance Targets and Stretch Goals for Solicitation | | | | | |
|---|-----------------------------------|---------------|--------------------------------------|--|--|
| | Molten Carbonate Fuel Cell System | | | | |
| Parameter | Target | Stretch Goal | Notes | | |
| Capital Cost, Installed (\$/kW) | 1,500 | 1000 | Year 2002 / 2006 | | |
| Power Degradation (%/1,000 hr) | <0.5 | <0.2 | Year 2002 / 2006 | | |
| ac Efficiency (% LHV) | 50 | 58 | Natural gas fuel Year 2002 / 2006 | | |
| Stack Lifetime (hr) | 20,000 | 30,000-40,000 | Year 2004 demonstrated / 2006 | | |
| Stack Replacement Cost (\$/kW) | | 300 | This solicitation / 2006 | | |
| Power Density (mW/cm ²) | >160 | 200 | This solicitation / 2006 | | |

| Table 3. Performance Targets and Stretch Goals for Solicitation | | | | |
|---|--------|--------------|------------------------------------|--|
| Proton Exchange Membrane Fuel Cell System | | | | |
| Parameter | Target | Stretch Goal | Notes | |
| Capital Cost, Installed (\$/kW) | 1,200 | 700 | Year 2002 / 2005, 50 kW basis | |
| ac Efficiency (%) | 40 | 45 | Year 2002 / 2005, natural gas fuel | |
| Power Degradation (% per 1,000 hr) | 0.6 | 0.4 | Year 2002 / 2005 | |

| Table 4. Performance Targets and Stretch Goals for Solicitation | | | | |
|---|---|--|--|--|
| | M | icro and Small Tu | urbines | |
| Parameter Target Stretch Goal Notes | | | | |
| Engine Fuel Efficiency | 36% | 40% | Before parasitic loads | |
| Emissions | <7 ppm NOx <20 ppm CO <20 ppm UHC | <3 ppm NOx <10 ppm CO <10 ppm UHC | | |
| Availability | 80% | 90% | Considering planned and unplanned down time | |
| Reliability | 93% | 98% | Capable of operating when available | |
| Capital Cost | \$600/kW | \$500/kW | FOB, not including site work or interconnect | |
| Mean Time Between Overhaul | 12,000 hours | 16,000 hours | | |
| Serviceable Life | 36,000 hours | 48,000 hours | | |
| Performance Degradation | <10% (over MTBO) | <5% (over MTBO) | | |
| Multi-Fuel Capability | 2 Premium 1 Bio-derived | 3 Premium 2 Bio-derived Variable Capable | Premium fuels include pipeline quality natural gas, propane, distillate, etc. Bio-derived include digester gas, landfill gas, gasifier gas, alcohols, etc. Variable spec. includes pipeline variability and limited bi-fuel flexibility. | |

6. What is the Funding Level for this RFP?

A single proposal may request no more than \$3 million in funding. Total available funding for this solicitation is anticipated to be up to \$26 million. However, the total solicitation funding may be less than the \$26 million, based on the number of proposals achieving the minimum passing score.

A Bidder may submit only one proposal per project. However, a Bidder may submit multiple proposals if each proposal is for a different project.

7. Is Match Funding Required?

Match funding is evaluated and scored as one of the evaluation criteria. The amount of match funding provided by Bidders will be evaluated and scored relative to the type and amount of estimated benefits. Care should be taken to provide match funding in amounts proportional to expected private benefits compared to public benefits generated by the program. In other words, projects providing a higher percentage of private benefits and lower percentage of public benefits should contribute a higher percentage of match funds. The ratio of match funding to PIER funding should reflect the ratio of private benefits to public benefits resulting from successful completion of the project. For additional information regarding match funding, see Section II, Proposal Format and Required Documents.

8. Is Equipment PurchaseAllowed?

We recommend that you use your own funds as well as other sources of funds which would be considered match funds to procure and/or build equipment. If State funds are used to purchase or build equipment, the State has legal ownership. In order to avoid issues regarding State ownership of equipment, Bidders are encouraged to not use PIER funds for equipment or \$5,000+ worth of materials that will be used to construct a product or machine. See Attachment 7, Contract Terms and Conditions for specific requirements.

9. What is the State's Definition of Equipment?

An item that costs more than \$5,000 and has a useful life of more than one year falls into the equipment category; if under \$5,000, it is not considered equipment and would be budgeted in the materials category. If a single fuel cell costs less than \$5,000, the fuel cell would not be considered equipment and should be budgeted in the materials category. If items are purchased that have incremental costs of less than \$5,000 but when combined (the product) exceeds \$5,000, the items should be budgeted in the equipment category. If the product has been capitalized and exceeds \$5,000, it should be budgeted as equipment. Subcontractors/vendors providing equipment should be budgeted in the equipment category, not the subcontractor category. See Attachment 7, Contract Terms and Conditions, paragraph 4. Definitions.

10. Is Repayment Required?

There are two options under this solicitation: PIER funds will be provided (a) with royalty payment provisions; or (b) through an exemption, without royalty payment provisions. Repayment is based on royalties once the Contractor generates gross revenues, or a subcontractor generates gross revenues that are paid to the Contractor.

I. Introduction, Continued

Except as otherwise provided in the Royalty Exemption Option discussed below, all parties receiving funds from this solicitation will be required to repay one and one-half percent (1_%) of the sales price of each project-related product or right for fifteen (15) years from the first date of sale, as further defined in the PIER contract terms and conditions (Attachment 7). Alternatively, there is a Buyout Option of two (2) times the amount of the PIER funding award, payable within two (2) years from the date royalties are first due.

The Commission has previously negotiated the handling of repayment requirements for PIER RD&D contracts with the University of California.

11. What is the Repayment Exemption?

At the discretion of the Commission, a research project may be exempted from the general royalty requirements of this solicitation if:

- The research project in question is primarily expected to produce new knowledge and/or understanding of the subject under study, rather than any commercial application of that knowledge, within the next 10 years (e.g., basic research); and
- The Bidder agrees to place all intellectual property developed from the project into the public domain.

All Bidders are required to indicate their choice of royalty funding mechanisms. Bidders must complete and submit Attachment 2, Application and Program Information Form.

12. What is the Schedule for the RFP?

Key activities and dates for this RFP are presented below. This is a tentative schedule. Please call the Commission Contracts Office to confirm dates.

| ACTIVITY | Action Date |
|--|--------------------|
| RFP Release | April 4, 2001 |
| First Pre-Bid Conference, Sacramento | April 19, 2001 |
| Second Pre-Bid Conference, Los Angeles | April 23, 2001 |
| Deadline for Submittal of Questions | April 24, 2001 |
| Distribute Questions/Answers and Addenda (if any) to RFP | May 1, 2001 |
| Due date for Notice of Intent to Bid | May 10, 2001 |
| Publishing deadline for DVBE Advertising * | May 18, 2001 |
| Deadline to Submit Proposals | June 4, 2001 |
| | 5:00 p.m. |
| Interviews with Bidders (if necessary) | July 9-13, 2001 |
| Posting of Notice of Proposed Award | July 25, 2001 |
| Commission Business Meeting to approve contracts | September 2001 |
| Contract Start Date | October 2001 |
| Latest Contract Termination Date | March 31, 2006 |

^{*}The Proposal will be rejected if the first day of DVBE advertising is later than May 18, 2001.

13. Will There be an Opportunity to Meet with the Commission about the RFP?

Yes. There will be two Pre-Bid Conferences, participation in these meetings is **optional** but encouraged.

The Pre-Bid Conferences will be held at the dates, times and places listed below. Participation by prospective Bidders is optional. Please call (916) 654-4392 or refer to the Commission's website at www.energy.ca.gov to confirm the date and time.

| Sacramento | Los Angeles (1/2 mile north of LAX) |
|------------------------------|-------------------------------------|
| April 19, 2001 | April 23, 2001 |
| 10:00 a.m. to 2:00 p.m. | 1:00 p.m. to 5:00 p.m. |
| California Energy Commission | Community Room |
| Hearing Room B, First Floor | 7166 W. Manchester Ave. |
| 1516 Ninth Street | (Enter through flag pole gate.) |
| Sacramento, California 95814 | Westchester, California 90045 |
| Telephone: (916) 654-4392 | Telephone: (310) 568-8772 |

14. How Do I ask Questions about the RFP?

During the RFP process, questions or clarifications about this RFP must be directed to the Contract Officer listed in the following section. You may submit written questions up to the day of the last Pre-Bid Conference and you may ask questions at the Pre-Bid Conferences. Questions may be submitted in writing via mail, electronic mail, FAX, verbally and by phone. The questions and answers will be mailed to all parties who requested a copy of this RFP from the

I. Introduction, Continued

Commission Contracts Office and all who attended a Pre-Bid conference. The questions and answers will also be posted on the Commission s website at: http://www.energy.ca.gov/contracts/index.html.

15. Who Do I Contact for Information Regarding the RFP?

JUDITH EFHAN, CONTRACTS OFFICER

California Energy Commission 1516 Ninth Street, MS-18 Sacramento, California 95814 Telephone: (916) 654-4397 FAX: (916) 654-4423

E-mail: jefhan@energy.state.ca.us

Verbal Communication

Any verbal communication with a Commission employee concerning this RFP is not binding on the State and shall in no way alter a specification, term, or condition of the RFP.

II. Proposal Format and Required Documents

About This Section

This section contains the detailed technical and mandatory proposal format requirements, and the approach to be used by the Bidder for the development and presentation of proposal data. The format is prescribed to assist the Bidder in meeting State bidding requirements and to enable the Commission to evaluate each proposal uniformly and fairly. Format instructions must be adhered to, all requirements and questions in the RFP must be responded to, and all required data must be supplied.

16. Is there a limitation in the Proposal Format and Length?

Proposals must be presented in a clear, complete, and concise manner. Volume II and optional Volume III should be kept to a combined maximum of forty (40) pages of text (exclusive of the Work Statement, budget spreadsheets, resumes, and attachments offered by the Bidder), if possible. Bidders are strongly encouraged to limit the length of their proposals, while adequately covering the proposal requirements.

Bidders who believe that supporting documentation or additional explanations beyond the forty (40) page limit are needed may attach such information in appendices to their proposal. Appendices are appropriate for items such as calculations of public and private benefits and associated discussions, calculations of performance enhancements resulting from successful completion of the proposed work, and summaries of accomplishments from previous RD&D projects that are relevant to the proposed project.

17. What is the Required Format for a Proposal?

All proposals submitted under this solicitation must be typed or printed using a standard 12-point font and a blank line between paragraphs. Pages must be numbered and sections titled. Spiral or comb binding is preferred. Colored photographs and colored graphs are discouraged. Bidders must submit the original and 12 copies of each of the following volumes. Your proposal should be organized as follows:

VOLUME 1 ADMINISTRATIVE SECTION

Cover letter
Application and Project Information Form, Attachment 2
Executive Summary Form, Attachment 2.1
Project Team List, Attachment 2.2
Contractor Certification Clauses, Attachment 3

Disabled Veteran Business Enterprise Participation, Attachments 4.1, 4.2, 4.3, as applicable

Small Business Form, if applicable, Attachment 5.1

Target Area Contract Preference Request Form, if applicable, Attachment 5.2 Enterprise Zone Act Preference Request Form, if applicable, Attachment 5.3 Local Agency Military Base Recovery Area Form, if applicable, Attachment 5.4

VOLUME 2 TECHNICAL AND COST SECTION

| | Section 1 | Scientific and Technological Baseline |
|--|-----------|---------------------------------------|
|--|-----------|---------------------------------------|

- Section 2 Problem Statement
- Section 3 Technical Objectives and Goals, and for fuel cell projects, the Fuel Cell System Performance Characteristics form, Attachment 9
- Section 4 Technical Approach and Probability of Success
- Section 5 Market-Connected Benefits of Successful Completion of the Project
- Section 6 Work Statement, Attachment 8, Exhibit A Schedule, Attachment 8, Exhibit B, and a Gantt chart
- Section 7 Project Cost, PIER Funding Request, Match Funding, and the Need for PIER Funding
- Section 8 Detailed Project Budget, Attachment 8, Exhibit C
- Section 9 Skill and Experience of Project Director and Project Team, list of key personnel and key subcontractors, resumes, Attachment 8, Exhibit D, and Attachment 6, Customer References

VOLUME 3 CONFIDENTIAL INFORMATION, IF APPLICABLE

List of Confidential Information and Intellectual Property, Attachment 8, Exhibit°E

Copy of Confidential Submittal

18. Is the Notice of Intent to Bid Required to Submit a Proposal?

Bidders are **encouraged** to submit a Notice of Intent to Bid (Attachment 1) to the Commission by the date and to the address listed in Section I. The Notice may also be faxed to the Commission's Contracts Office at (916)°654-4423. This Notice is not binding on prospective Bidders, but will be used to aid the Commission in planning for the resources needed to evaluate proposals that are subsequently submitted. All Notices received by the Commission will be kept confidential until the Notice of Proposed Awards is posted.

19. What is Required in Volume 1 - Administrative Information?

The following is a list and brief description of the items (sections) that must be submitted in Volume 1 of each proposal. Bidders should carefully read this format and content information (along with the eligibility, completeness and feasibility criteria, and the evaluation criteria presented subsequently) to

understand the relative importance of the information being requested in the proposal. The <u>following five (5)</u> sections must be included or the proposal will <u>fail the completeness screening</u> and will be rejected prior to technical evaluations.

1. Cover Letter

The Bidder must submit a cover letter on company letterhead that includes:

- A summary of the Bidder s ability to perform the work described in the Work Statement
- A statement that the Bidder is willing to enter into a contract with the Commission to conduct the proposed project and accepts the terms and conditions offered in this RFP (Attachment 7).

A person who has the authority to bind the Bidder to a contract must sign the cover letter.

2. Application and Project Information Form

Complete the Application and Project Information Form (Attachment 2), including a brief explanation of how the proposed project is appropriate for this solicitation. Have a person who is authorized to sign contracts for your company sign the original of this form as the Authorized Official.

3. Executive Summary Form

Prepare an Executive Summary (Attachment 2.1) of the project (no longer than two [2] pages), which describes in summary form:

- The problem, barrier, or deficiency, amenable to an RD&D solution, that the proposed project will address in relationship to other current work in the field
- The technology or science being developed and advanced
- The unique products, services or levels of understanding that are expected to result from the project
- The technical approach and project steps that explain what will be done and how it will be done
- The quantitative goals and objectives of the project
- The overall project cost
- The amount of PIER funding being requested
- The amount, sources and nature of match funding
- The types, estimated amounts and timing of public benefits to be provided if
 the project is successful and if the results are incorporated into commercial
 products. Public benefits include, but are not limited to, the annual amount of
 electrical energy to be saved, the amount of electrical power price reduction
 expected, the tons per year of pollutants reduced, the installed capacity of

EPAG generators in a specified future year, and/or the degree to which system reliability or power quality is enhanced.

• Estimated amounts of additional time and spending, if any, required to realize the public benefits that are being claimed for this project. Identify the types of entities that would be involved in these additional efforts.

4. Project Team List

Provide a list of all members of your project team (Attachment 2.2) grouped into the following five (5) categories:

- Category 1 Project Contractor
- Category 2 Project Director
- Category 3 Technical Team Leads and Members (Bidder's staff or subcontractors)
- Category 4 Administrative Staff
- Category 5 Others

5. Required Administrative Forms and Documents

A. Contractor Certification Clauses Package (Attachment 3)

These are standard terms and conditions required to enter into a contract with the State of California.

B .Disabled Veteran Enterprises Participation Requirement (Attachments 4.1, 4.2, 4.3)

Public Contract Code Part 10115, et seq., and Title 2, California Code of Regulations, Part 1896.62, require all Contractors who are not governmental agencies to pursue Disabled Veteran Business Enterprise (DVBE) participation in their project. Bidders must either have three (3) percent DVBE participation in the project or must document a good faith effort to obtain DVBE participation. Failure to comply with this requirement by submitting complete DVBE forms in the proposal will result in rejection of the bid and disqualification from evaluation, scoring and contract award.

Use Attachments 4.1 through 4.3, and the instructions on the back of each form, to document DVBE participation and/or good faith efforts. It is important that Bidders thoroughly read the instructions provided on each DVBE form. The DVBE compliance process is as follows:

x If you are proposing to **meet the three percent (3%) participation** goals, complete and submit Attachment 4.1, and Attachment 4.2, with a copy of the DVBE certification letter(s) from by California's Office of Small Business Certification and Resources (OSBCR) and acceptance letter from the DVBE.

- x If you are proposing to **partially meet the participation** goals, complete and submit Attachment 4.1 and Attachment 4.2, and attach a copy of the DVBE certification letter(s) from OSBCR, as well as Attachment 4.3 to demonstrate the good faith effort you performed in your attempt to meet full participation. Your good faith effort must include advertising, which is explained in the Attachment 4.3 instructions.
- x If you have **no DVBE participation** in your proposal, you must complete and submit Attachment 4.3 to demonstrate the good faith effort you performed in your attempt to meet participation. Your good faith effort must include advertising, which is explained in the Attachment 4.3° instructions.
- x If you or a subcontractor have **applied for DVBE certification**, complete the appropriate Attachments as explained above, and include a copy the application submitted to OSBCR. Refer to Attachment 5 for instructions on how to apply for certification as a DVBE.

The forms to be used are:

- Attachment 4.1 Prime Bidder's Certification of Disabled Veteran-Owned Business Participation
- Attachment 4.2 List of Disabled Veteran-Owned Business Participation
- Attachment 4.3 Documentation of Good Faith Efforts.

C. Small Business Preference (Attachments 2 and 5.1)

California Government Code Section 14835 et seq., requires that a five percent (5%) preference be given to Bidders who qualify as a small business. To qualify for the small business preference points in the evaluation criteria, Bidders can be identified as a small business through either:

 The State of California, Department of General Services, Office of Small Business Certification and Resources (OSBCR) formal certification processes. The Bidder must include a copy of the approved certification letter or application for certification,

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• The Federal Government, Small Business Administration (SBA) self-certification guidelines.

Bidders claiming small business preference must indicate either State of California or Federal Government qualification on Attachment 2, Application and Program Information. Small Business points will be awarded only if the Bidder qualifies. A Bidder having a small business

subcontractor qualified does not qualify the Bidder for the small business preference points.

20. What is Required in Volume 2 — Technical and Cost Information?

The technical merit of the proposal will be evaluated and scored on the Bidder's submittal in the Technical and Cost Section of the Proposal. The Bidder is responsible for submitting a technically complete and responsive proposal, and for presenting compelling and convincing evidence that the proposal is worthy of PIER funding. In scoring the proposal, the Commission evaluation team will not depend upon its prior detailed knowledge of fuel cell, turbine and hybrid technological status, issues and markets, or any prior work that the Bidder has done for the Commission. Therefore, the Technical and Cost Section of the Proposal should be clear and concise and should address the submittal requirements completely.

The Bidder can assume that proposal evaluators are familiar with the electricity supply and demand situation in California, natural gas supply issues, electric utility restructuring, proceedings before the California Energy Commission and the California Public Utilities Commission related to distributed generation and interconnection, and interconnection issues and standards development. Therefore, the Bidder should <u>not</u> discuss issues such as the potential for fuel cells and turbines to be used as Distributed Energy Resources (DER) and the roles that DER can serve in terms of system reliability and electricity supply, unless such discussions are integral to the scope of the proposal s Work Statement. The Bidder s discussions should always focus on the proposed project and expected results.

The information provided in the Executive Summary form (Attachment 2.1) in Volume 1 must be supported convincingly in Volume 2, the Technical and Cost Proposal. The Executive Summary is a critical part of your proposal.

Bidders who believe that supporting documentation beyond that requested for Volume°2 is needed and will improve their technical score may attach such information in appendices to their proposal. Appendices are appropriate for items such as descriptions of work being done by the project team on related projects, the Bidder's quality control and quality assurance plans and procedures, calculations of public and private benefits and associated discussions, calculations of performance enhancements resulting from successful completion of proposed work, calculations of cost reductions resulting from successful completion of the proposed work effort, and copies of team publications relevant to the proposed work. Any item submitted in an Appendix should begin with a summary of the relevance of that item to the proposal and the evaluation criterion to which it applies.

Volume 2 must contain the technical and cost information that responds to the RFP, and with the exception noted below, should be presented in the order listed below. There must be a Table of Contents, with page numbers for each section, before Section 1. The sections in Volume 2 are organized into two groups, Sections 1 through 5, and Sections 6 through 9.

The purpose of the first five sections is for the Bidder to provide a compelling narrative or story that justifies PIER funding of the proposed project. The Bidder should demonstrate a clear understanding of the state-of-the-art of the technology, the goals and objectives of the project, the niche filled by the proposed project in ongoing technical developments, the technical and economic significance of the results to be derived from successful completion of the project, the way in which these results will be accepted in the marketplace, and the public benefits to be derived by California electricity ratepayers. We have divided this story into the following topics:

- 1. Scientific and Technological Baseline
- 2. Problem Statement
- 3. Technical Objectives and Goals
- 4. Technical Approach and Probability of Success
- 5. Market-Connected Benefits of Successful Completion of the Project.

The boundaries among the above topics may be somewhat arbitrary. There is no need to repeat information from one topic to the next. If rearranging the order of two or three of the above topics helps to present your project in a logical fashion, that is acceptable.

The second group of topics describes the specific details of the Bidder's RD&D project, and must be presented in the following numerical order:

- 6. Work Statement and Schedule
- 7. Project Cost, PIER Funding Request, Match Funding, and the Need for PIER Funding
- 8. Detailed Budget
- 9. Skill and Experience of Project Director and Project Team.

Below is a detailed description of the information the Bidder should present in Sections 1 through 9 of Volume 2.

1. Scientific and Technological Baseline

Describe the scientific and technological baseline, that is, the current state-of-the-art or the developmental status of the subject technology to be advanced. Relate the developmental status of the subject technology to the performance of fuel cells, turbines and/or hybrids, and to the relevant performance targets in Section I, Tables 1-4.

Identify entities engaged in development of the subject technology. If no one else is performing any related development work, state that explicitly. Identify whether or not the proposed project duplicates or overlaps with other ongoing RD&D.

Emphasize past advances that the Bidder s team has made in areas relevant to the proposed work. Describe Bidder s relevant work, accomplishments, failures, ongoing work, RD&D projects, funding levels and funding sources. Be quantitative and rigorous in the discussion. List research papers, conference papers and presentations with full references, and summarize significant accomplishments that have been reported.

Within the technological baseline discussion it may be advantageous for the Bidder to discuss the status of fuel cells, turbines and/or hybrids in general so as to put the proposed work within the context of generating system development. The discussion could include factors such as developers and manufacturers, development status (whether laboratory scale, alpha testing, beta testing, commercially available), performance characteristics (efficiency, lifetime, emissions and other environmental characteristics including footprint and land requirement), manufacturing cost and selling price, and operation and maintenance costs.

The scientific and technological baseline described here must facilitate the evaluation of the proposed RD&D effort. That is, there must be continuity between the current status of the subject technology and the proposed effort.

2. Problem Statement

Describe the deficiencies that exist for the subject technology. The deficiencies should illuminate the question of *why* the proposed project should be done.

Identify and discuss the principal barriers, key unresolved issues, and knowledge gaps that hinder the development and widespread use of fuel cell, turbine or hybrid systems in California **that your proposal addresses**. Barriers may be grouped under the following categories, or other categories that the Bidder deems appropriate:

- Scientific and technological such as insufficient scientific understanding of relevant phenomena and processes, inadequate materials, high cost of materials, poor durability, low reliability, low power density, low energy density, lack of detailed engineering designs and design trade-off analyses, inadequate component development, high cost of fabrication techniques, lack of automated manufacturing, insufficient field testing, or insufficient field demonstrations.
- Market such as inadequate consumer knowledge or limited system supply and maintenance infrastructure. (Note: This RFP does not seek and will not

fund proposals for market research, consumer education, commercialization, or market conditioning activities.)

- Institutional such as regulatory hurdles (e.g., atmospheric emission limitations) or lack of adopted interconnection standards.
- Environmental such as NOx emissions above those set by Air Resources Boards or Districts within California, excessive noise, or high water consumption.

Explain why these barriers have not been addressed by the marketplace or by other institutions.

Explain why the barriers should be addressed at this time. For example, place the proposed work into the context of the spectrum of barriers that fuel cells, turbines or hybrids face regarding widespread deployment and adoption. Discuss any perspectives on issues that are of particular importance and **that are addressed by your proposal**. Be succinct and as quantitative as possible.

3. Technical Objectives and Goals

The EPAG Objectives, Targets and Stretch Goals for this RFP are given in Section I. Discuss how and to what degree your proposed project contributes to realizing either the EPAG Objectives, Targets and Stretch Goals, or other significant contributions leading to EPAG technology improvement and market introduction and penetration in California.

As a hypothetical example of meeting other significant goals, your project may not be able to reach an RFP capital cost target of \$800/kW for an EPAG system by 2010, but your project may be able to reach a capital cost of \$1,200/kW by 2003. If this higher capital cost is an improvement over the baseline technology, your project might offer public benefits equal to or greater than those offered by another proposed project that claims the ability to reach the hypothetical \$800/kW cost target, but several years later.

Proposals for fuel cell projects should complete Attachment 9 the Fuel Cell System Performance Characteristics form. Discuss any tradeoffs that must be made in achieving improvements in one performance parameter while compromising improvements in one or more other parameters. Certain proposals, such as those for advanced materials and component development, may not be closely linked to the performance of a system. Such fuel cell proposals need not include the form; however, the proposal should state that the form is not applicable lest evaluators assume that the proposal is incomplete.

If your project is for a cogeneration system, identify the expected market applications. Discuss the match between the thermal and electrical outputs of the cogeneration system with the load profiles of the expected end use sites. Describe

the manner in which the waste heat will be utilized. Show the calculations for the expected First and Second Law efficiencies.

List and describe the technical performance goals (improvements in technology or the state of knowledge that can be measured and quantified) for your proposed project. Your goals must be quantitative, verifiable and measurable by physical observation or testing. If the improvements that your project will make are not amenable to measurement, surrogate performance metrics that can be measured must be given. Describe the methodology(ies) that will be used at the completion of the project to determine if the goals or performance metrics have been achieved.

List and describe the technical objectives desired conditions outside the project itself that will result from the success of the project.

4. Technical Approach and Probability of Success

Present the nature of the work that will be done, the underlying technical considerations, and the technical merit of the proposed project. Explain how scientific and engineering principles will be applied so as to achieve the proposed project s objectives and goals.

Identify and describe any innovative or distinctive features of the approach. Explain why any innovative approach is expected to be more successful than prior approaches.

Describe any proprietary market or technical information not currently under your control or to be developed as part of this project that will be necessary to complete the project. If such information is necessary, describe how it will be obtained. Describe any unresolved intellectual property issues.

Explain how the proposed work extends or complements prior RD&D. That is, continue the discussion given under Scientific and Technological Baseline. Explain how and why the proposed RD&D is the next and necessary step. Succinctly state the **specific advances** in science and technology that the proposed project will achieve, if successful.

Show that a successful project will make a significant difference in the status of the subject technology. Explain the manner in which, and the degree to which (be quantitative), the proposed effort will address and resolve the principal barriers, issues and knowledge gaps described in the Problem Statement.

Describe the level of risk associated with the project. Discuss the probability that the project will achieve its goals and objectives and that science and technology will be advanced. Discuss the technical viability of the proposed effort.

5. Market-Connected Benefits of Successful Completion of the Project

Describe the expected outcomes the effects on fuel cell and/or turbine stakeholder communities if your proposed RD&D project is successful. Identify the beneficiaries and users of the scientific or technological knowledge expected to be gained.

Economic Benefits if the Project is Successful

List and describe the economic performance goals improvements in technology or the state of knowledge that can be measured and quantified for your proposed project. Quantify and discuss the expected incremental benefits from the successful completion of the project. Categories of benefits include reduced cost of manufacturing, improved fuel conversion efficiency, and more reliable and durable components. The benefits are related to, and should be consistent with, the project objectives and goals.

Describe any expected patentable ideas or royalty payments.

Distinguish between the <u>public</u> benefits (especially those to the California electricity ratepayer) of the proposed project, and the <u>private</u> benefits, including those to the Bidder. Apportion benefits between the public and private sectors. Compelling arguments justifying the apportionment should be made if most of the benefits are claimed to be public.

Note that effective January 1, 2003, all electrical generation technologies shall be either (1) certified for use by the California Air Resources Board (CARB) and exempted from district permitting requirements, or (2) permitted by a district. Emissions shall be made equivalent to the level determined by CARB to be the best available control technology for permitted central station power plants in California. (SB 1298 [Bowen], Health and Safety Code Sections 41514.9 and 41514.10). Discuss any non-conformance of the system being developed with respect to this requirement. Details on CARB s implementation of SB1298 can be found at http://www.arb.ca.gov/dg/dg.html.

Market Connection and Economic Benefits if the Project is Successful

A key objective of the PIER program is to develop energy products or services that are connected to the market, that is, those that will be installed, so that they can produce public benefits for California's electricity ratepayers.

List and describe the economic objectives of the project desired conditions outside the project itself that will result from the success of the project.

Describe new environmental or safety issues associated with the expected product, if any.

Assume that your project is successfully completed. Describe a plausible scenario leading to commercial introduction of an economically viable EPAG generating

system. Estimate the time and expense required to reach this point. Estimate the timeframe under which the economic benefits will accrue. Describe any additional activities, beyond those in the Work Statement, that must be taken to achieve these benefits. State any assumptions made in estimating the benefits, and justify the bases for the assumptions.

This discussion should (1)°identify a specific market(s) for products or services resulting from the RD&D efforts, (2)°estimate the size of that market, and how much of that market exists in California, (3)°provide an overview of the pathway(s) by which such products or services will ultimately enter the marketplace, (4)°identify infrastructure changes necessary for commercialization, (5) identify people or entities that can aid in facilitating market entry and (6) describe important incentives these entities will have to commercialize the°product.

Demonstration projects should be closely connected to the market, while fundamental research projects may have a less quantifiable market connection. If your project is for a demonstration or test of a complete EPAG electricity generating system, clearly identify the market segments (residential, commercial, industrial by SIC codes) and service (ancillary services, baseload, peaking, back-up) being targeted. Discuss the match between the output and duty cycle of the generating system and the host load.

Your discussion of market connection should be limited to one or two pages; we are not requesting an exhaustive market study. However, if a market study already exists and is particularly relevant, please provide its reference.

6. Work Statement

The Work Statement should be:

- Consistent with the proposal s problem statement, objectives, goals and technical approach
- In sufficient detail and clarity to be incorporated directly into a contractual agreement.

Your Work Statement must contain a sequence of tasks, including a Technology Transfer Plan, and a Schedule as described below. Certain proposals also must contain a Production Readiness Plan. System demonstration projects and cogeneration projects have additional submittal requirements.

Sequence of Tasks

The work effort should be divided into a series of logical, discrete and sequential tasks. For every task there must be the following:

• Number (2.1. 2.2, 2.3, etc.) and Name of the task.

- A specific **Objective** which identifies the expected result(s) and accomplishments, including a description of how success in achieving the objective will be measured. (The objective of this task is to ______.)
- Activities and work to be performed. Describe any particular approach, standard, or method you propose to use to accomplish the task. Test plans and testing procedures should be described in detail including factors such as instrumentation, data collection, data analysis, and statistical analyses. Test results shall include relationships among performance, efficiency, emissions, temperature, pressure and all other parameters that qualify and quantify the subject technology. The description of activities must be sufficiently detailed to be incorporated directly into a Standard Agreement. Use action verbs to describe efforts to be undertaken by the Contractor, and the deliverables that will result from the efforts. (e.g., The Contractor shall build _____. The Contractor shall prepare a report that describes _____.)
- List of **deliverables.** Deliverables are products that incorporate the knowledge and understanding gained by performing the activities and that are submitted to the Commission for review, comment and approval. Deliverables include written reports that describe methods, test plans, results of testing, analysis of data, conclusions, and recommendations for future study, workshop agendas and summaries, description and photographs of equipment/product developed, summaries of advisory group meetings, computer software with written instructions for data input and use of the software, if intended for public or Commission use, and production prototypes. The sum of the deliverables should be sufficiently detailed to be of use to stakeholders and other researchers. The level of detail should be sufficient for an observer to assess whether the project objectives and goals have been successfully met.
- List of the Task Leader, key personnel and key subcontractors.
- **Risks or potential problems** that could prevent the task from being completed on time and on budget.

If your project is for a demonstration, or if your project involves testing, one of the tasks should be Test Plan preparation. The Test Plan should include considerations such as the number of hours of operation, the thermal cycling schedule, the type of monitoring to be performed, the manner in which data will be analyzed and reported, and a Quality Control and Quality Assurance Plan to assure data validity. A Critical Project Review generally will be conducted at the conclusion of this task and prior to hardware testing.

If your project is for a demonstration and if the demonstration is to be grid-connected, or will develop hardware for grid-connected applications, discuss the degree to which the demonstration will comply with both *Final Energy Commission Recommendation Regarding Distributed Generation Interconnection Rules*, Publication 700-00-006, and *Distributed Resources Interconnected with Electric Power Systems*, IEEE Publication P1547.

If your project is for the pre-commercial demonstration of a generating system, pre-installation system testing by the manufacturer or system integrator should be one of the tasks. If your demonstration is for a turbine, your Test Plan must conform to the testing protocols being developed under a Commission contract to the University of California Irvine. Contact Vincent McDonell at 949-824-1999 for information.

Technology Transfer Plan

A Technology Transfer Plan must be one of the Tasks. The objective of this task is to make the knowledge gained, experimental results, and lessons learned readily available to decision-makers.

The Technology Transfer Plan task must explain how the deliverables from the other tasks will be distributed and how it will be made available to the public. The level of detail expected is least for research-related projects and highest for demonstration projects.

Production Readiness Plan

Projects that will lead to the mass manufacturing of developed hardware within the next five years should also include a task addressing production readiness. The Production Readiness Plan should consider the following:

- Identification of critical production processes, equipment, facilities, personnel resources, and support systems that will be needed to produce a commercially viable product
- Internal manufacturing facilities, as well as supplier technologies, capacity constraints imposed by the design under consideration, identification of design critical elements and the use of hazardous or non-recyclable materials. The product manufacturing effort may include proof of production processes;
- A projected should cost for the product in production;
- The expected investment threshold to launch the commercial product
- An implementation plan to ramp up to full production.

The degree of detail in the Production Readiness Plan discussion should be proportional to the complexity of producing the proposed product and its state of development. That is, Bidders who wish to use PIER funds to optimize more complex production manufacturing processes, or have manufacturing processes closer to being market ready, will be expected to provide a higher degree of detail on the manufacturing process than Bidders whose manufacturing process is relatively simple or relatively far from being market ready.

Schedule

Complete Attachment 8, Exhibit B — Task Deliverables, Schedules. In addition, provide a Gantt Chart, not to exceed a single sheet, as an overall summary of the project schedule.

7. Project Cost, PIER Funding Request, Match Funding, and the Need for PIER Funding

In a quantitative and definitive manner, discuss:

- The appropriateness of the total project cost considering the scope of work and the relevant expertise of the Project Team.
- The appropriateness of the amount of PIER funding requested for the project considering the anticipated absolute and proportional public benefits to California electric ratepayers.
- The amount of match funding that will be brought to this project. Discuss the appropriateness of the level of match funding considering the estimated and anticipated level of private benefits. Describe the nature of the match funding being offered by the Bidder and subcontractors.
- Why PIER funding for the project is <u>required</u> that is, why this project cannot be funded within competitive or regulated markets. Potentially valid reasons for PIER funding include high risk/reward concerns, high financial cost, or the non-exclusive nature of the project results, which would result in financial gain for others rather than for the Bidder. Defend your reason.

Projects whose results are more likely to lead to products and services that can be commercialized in the near future will generally need a higher percentage of matching funds than projects whose results are further removed in time from commercialization.

Describe any extra value that the Bidder provides. For example, concisely explain how previous and current work by the Bidder, patents and patent applications, proprietary information, data bases, unique facilities, specialized equipment, or specialized expertise will be leveraged into the proposed work.

Acceptable and Non-Acceptable Sources of Match Funding

Discuss the sources of match funding. For example, Bidder and/or team members, project partners, investors, lenders, equipment manufacturers, utilities, universities, government entities or others. Discuss whether match funding is in cash or in-kind services. In-kind contributions include donated labor hours, equipment or facilities.

If the match funding comes from a related project, describe the related project in detail. Distinguish between the scope of work for this proposal and the scope of work for the related project.

Staff time, laboratory space, equipment, and most property can count as match funds if they are fully dedicated to the project for the time the property or equipment is required by the contract, and if the value of the contribution is based on documented market values or book values and is depreciated or amortized over the term of the project using standard accounting principles.

Property and equipment that do not qualify as match funds include such items as standard office supplies and property or equipment that is part of the Bidder's normal business activity (desks, typewriters, telephones, computers, software, etc.).

In all cases, the Commission reserves the right to review and approve or disapprove the crediting of contributions and the amounts of those contributions as match funding.

Prior investments in the project do not qualify as match funds. Funding from other Commission projects or contracts does <u>not</u> qualify as match funding. The sources and amounts of match funding must be identified in the Bidder s budget.

Proposed match funding must be spent concurrently with PIER Program funds, and only on the project elements described in the proposal. Match funds can be spent once the Commission has approved an awarded contract at a scheduled Business Meeting. However, PIER funds cannot be spent until the Bidder signs the contract and the Department of General Services, Office of Legal Services approves the contract.

Using the categories identified below, prepare three (3) itemized Exhibit C Budgets:

- an overall project budget that itemizes the total PIER and match funds,
- a PIER Reimbursable Budget that itemizes the requested PIER funds, and
- a Match Funded Budget which documents all other sources of funding and inkind services included in the cost of the project.

Use the format (Excel files) in **Attachment 8, Exhibit C (6 forms)** to prepare these budgets.

q Personal Services

Include projected increases in hourly rates and fringe benefits to cover each year of the contract period:

- Direct labor, including hourly rates, hours, classifications/names
- Fringe benefits, percentage and applicable classifications.

q Subcontractors

List total cost by each subcontract, identifying those that are DVBE subcontractors, including hourly rates and fees for all individuals.

q Operating Expenses

Materials—Identify those materials that are estimated to be over \$5,000 in value and dedicated to the project. See Attachment 7, Contract Terms and Conditions for definitions.

- Equipment—Identify each piece of equipment that is estimated to be over \$5,000 in value proposed for purchase using PIER funds. Bidders are discouraged from using PIER funds to pay for equipment. Please see Attachment 7, Contract Terms and Conditions, for restrictions that apply to the purchase of equipment with State funds. Subcontractors supplying equipment must be budgeted in the equipment category.
- Travel—Identify all travel expenses for the project for which reimbursement will be sought. Indicate the number of trips to be taken and the destinations and estimated costs. See Attachment 7, Terms and Conditions, for restrictions that apply to travel and per diem.
- Miscellaneous expenses—Any expense not included in any of the other categories, including other direct rate charges.

q Fees (attach audit documentation to verify rates)

You must include documentation in your cost proposal to support your Overhead, Direct, Indirect and General and Administrative rates. If the Federal Defense Contracting Audit Agency (DCAA), any other governmental entity or private audit firm has audited and accepted your rates, please provide this documentation.

- Indirect Overhead Rate list percentage, items covered and application to specific categories.
- General and Administrative Overhead Rate list percentage, items covered and application to specific categories.
- Profit Rate (Fee) list percentage, basis and application to specific categories. Profit cannot exceed ten percent (10%). The Prime Contractor is not allowed to add profit to subcontractor invoices.
- Any other rate not listed above identify additional rates, percentages and method of application.

q Total Expenditures

Sum of all the categories.

Expenses for contract projects will be reimbursed in accordance with the project budget included in the proposal. PIER Program funds can only be used to reimburse the Contractor for expenses paid by the Contractor, and can only be paid after the Commission has received and approved the deliverables due for the billing period. Expenses to be paid with PIER funds cannot exceed the total amount of funds requested in the project proposal and listed in the budget section of the contract without prior Commission amendment and authorization. Only expenses incurred during the term of the contract can be reimbursed.

9. Skill and Experience of Project Director and Project Team Project Director

Name the Project Director who will be the Contractor's person who is primarily responsible for coordinating and managing the proposed project.

Describe each of the following:

- The Project Director's capabilities and experience in managing successful EPAG-related RD&D projects
- The process the Project Director will take to effectively manage the proposed project to achieve project objectives and goals, including ensuring the development of quality products within the allocated budget and schedule
- How the Project Director will monitor progress and develop recommendations for adjusting the research direction and focus based upon the results of research.

Project Team

Describe the capabilities and experience of the proposed project team:

- Identify the key RD&D personnel of the Contractor, key subcontractors, and key personnel of the key subcontractors.
- Describe the capabilities of the team members to conduct the technical work proposed, administer the research process, control costs, maintain project schedule, and if applicable, move the products into the marketplace, with reference to past experiences.
- Describe how the project team is uniquely or unusually well qualified to perform the proposed effort.

Resumes

Provide resumes for the Project Director, the task leaders, key project team members and key subcontractors. Emphasize individual accomplishments in the resumes relevant to the proposed project.

Key Personnel and Key Subcontractors

List Contractor's key personnel, subcontractor's key personnel and key subcontractors in the project, use Attachment 8, Exhibit D. Briefly, keys are those individuals or subcontractors/vendors who would be difficult to replace and could impact the project progress/outcome. The Commission has approval rights if replacing these individuals or vendors. See Attachment 7, Contract Terms and Conditions, paragraph 4, Definitions and _____, Project Management.

21. What can I put in Volume 3 — Confidential Information

Bidders are discouraged from submitting any confidential information regarding their proposed project under this solicitation. However, if the Bidder believes that certain confidential information would be important for the scoring committee to

consider, or would clarify the status of the development of the technology prior to any awarded contract (i.e., benchmarking for royalty purposes), Bidders may submit such specifically requested and identified confidential information as a separate volume to the Commission. Include at the beginning of this volume the Confidential and Pre-existing Intellectual Property form, Attachment 8, Exhibit E.

The Confidential Volume 3 must be packaged and sealed separately from the non-confidential Volumes 1 and 2. Volume 3 must accompany Volumes 1 and 2, must be clearly marked **Confidential Information for RFP 500-00-509**, and must include the **Bidder s name** and the **project title**. Confidentiality will be determined by the Commission in accordance with the confidentiality regulations contained in Title 20, California Code of Regulations, Sections 2501-2505.

The Commission will not accept or retain any proposals that are submitted entirely in confidence. However, all proposals will be kept confidential until the Notice of Proposed Awards is posted.

III. Evaluation Criteria

About This Section

This section explains the overall evaluation process and the technical and policy evaluation criteria. It describes how the proposals will be evaluated for completeness, eligibility and fundamental scientific feasibility. It also describes the evaluation stages, preference points, and scoring of all proposals.

The entire evaluation process from receipt of proposals to the posting of the Notice of Proposed Award is confidential.

A Bidder's proposal will be evaluated and scored based on its response to the information requested in this RFP. During the evaluation and selection process, the Commission may interview a Bidder either by telephone or in person at the Commission, and/or conduct a site visit at the Bidder's facilities for the purpose of clarification and verification of information provided in the proposal. However, these interviews may not be used to change or add to the contents of the original proposal.

22. Proposal Screening Process

Completeness, Eligibility, and Feasibility Screening

All proposals will be initially screened for completeness, eligibility, and fundamental scientific feasibility. In particular, proposals will be screened for completeness on the basis of whether or not the proposal contains sufficient information to enable a useful evaluation to be conducted. Proposals that fail the completeness, eligibility, and feasibility screening will not be evaluated further under this RFP.

A. Completeness Screening

The following subsections must be included or the proposal will fail the completeness screening and will be rejected prior to technical evaluations. contents of each volume is discussed in more detail in Section II.

Proposals must contain:

Volume 1 — Administrative Section

- 1. Cover Letter. The cover letter must be signed by a person who has the authority to bind the Bidder to a contract.
- 2. Application and Project Information Form (Attachment 2)

III. Evaluation Criteria, Continued

- 3. Executive Summary Form (Attachment 2.1)
- 4. Project Team List (Attachment 2.2)
- 5. Contractor Certification Clauses Package (Attachment 3)
- 6. Completed Disabled Veteran Business Enterprise forms (Attachments 4.1 through 4.3)
- 7. Small Business Preference Certification Letter, if applicable (Attachment°5)

Volume 2 — Technical and Cost Sections

Table of Contents.

- 1. Scientific and Technological Baseline
- 2. Problem Statement
- 3. Technical Objectives and Goals (For fuel cell projects, the Fuel Cell System Performance Characteristics form, Attachment 9)
- 4. Technical Approach
- 5. Market-Connected Benefits of Successful Completion of the Project
- 6. Work Statement (Attachment 8, Exhibit A)
 The Project Work Statement section contains:
 - a) Tasks For every task there must be:
 - Task number and name
 - Objective
 - Activities
 - Deliverables
 - Task Leader, key personnel and key subcontractors
 - Risks or potential problems.
 - b) Technology Transfer Plan
 - c) Production Readiness Plan (Required only for projects developing hardware.)
 - d) Schedule (Attachment 8, Exhibit B) and a Gantt chart for the entire project.

- 7. Project Cost, PIER Funding Request, Match Funding, and the Need for PIER Funding
- 8. Detailed Project Budget Forms (Attachment 8, Exhibit C)
- 9. Skill and Experience of Project Director and Project Team, list of key personnel and key subcontractors (Attachment 8, Exhibit°D) and resumes.

Optional Volume 3 — Confidential Information

- 1. Confidential and Pre-existing Intellectual Property form (Exhibit E)
- 2. Confidential information.

B. Eligibility Screening

To be eligible for possible funding under this EPAG solicitation, proposed projects must meet all of the following eligibility criteria:

- 1. The project must primarily address one of the eligible technologies discussed in Section I.
- 2. The project must carry out EPAG technology-related RD&D activities that will advance science or technology not adequately provided by competitive and regulated markets.
- 3. The project must be formulated so as to provide clearly identified benefits to California s electricity ratepayers.
- 4. Each proposal must be limited to a single, specific project. Individual proposals that request funding for multiple projects are not eligible for this solicitation, and will be rejected from further evaluation. The Commission has full discretion to determine whether a proposal is for a project (and therefore eligible for this solicitation) or a program (and therefore not eligible for this solicitation). A Bidder may submit separate proposals for different projects.
- 5. The proposal must document legal compliance with either the participation or good faith efforts required pursuant to the Disabled Veteran Owned Business Enterprises (DVBE) program. Proposals not documenting compliance with the DVBE program will be rejected from further evaluation under this solicitation.
- 6. The proposal must not be marked confidential in its entirety. Proposals that are marked confidential in their entirety will be rejected from further evaluation under this solicitation.

7. The proposal must be received at the California Energy Commission Contracts Office by the time and date indicated in Section I.

C. Feasibility Screening

Proposals will be evaluated for fundamental feasibility on the basis of whether the proposed project appears to comply with known scientific principles, and if not, whether the proposal contains a sufficiently sound explanation to justify proceeding with a further evaluation. Proposals that fail the feasibility screening will not be evaluated further under this RFP.

23. How Will Proposals be Scored?

Overview of the Evaluation Scoring Process

All proposals that pass the Completeness, Eligibility and Feasibility Screening will be further evaluated and scored for merit. The Commission may use Commission staff, staff of other agencies, private consultants or other designated representatives of the State to evaluate the proposals. All proposal evaluators and scorers will keep the contents of the proposals confidential. Both the technical and policy merits of each proposal will be evaluated.

A Commission Scoring Committee will evaluate and score proposals according to the evaluation criteria below. Eligible proposals will be ranked in descending order based upon total score. All proposals receiving a weighted score of ninety (90) points or more will be considered for possible funding. The Commission s RD&D Policy Committee will recommend how far down the ranked list of proposals scoring ninety (90) points or higher that will receive awards. The Committee's recommendations are presented at a Commission Business Meeting and can be approved as recommended, or the Commission can adjust the cut-off lines higher or lower in the ranking.

Projects above the Commission s adopted cut-off line cannot be skipped-over for funding. That is, a project with a higher score cannot be rejected while a project with a lower score is funded. Projects that fall below the Commission s adopted cut-off line will not be funded at this time.

If a successful Bidder decides to withdraw a proposal, or if a Bidder will not sign a proposed contract within the allotted time, the project can be disqualified from this award and the next highest-ranked project may be funded instead.

The Scoring Committee will give a score from zero to ten for each criterion described below, based upon the information provided by the Bidder's proposal. Each score will then be multiplied by a weighting factor to obtain the total points for that criterion. Scores will be assigned in accordance with the following guidelines:

| Score | Proposal Response |
|-------|---|
| 0 | Not Responsive to the criterion |
| 1 - 2 | Response is Minimal |
| 3 — 4 | Responds only Marginally to relevant considerations under the criterion |
| 5 - 6 | Responds Satisfactorily to Most relevant considerations under the criterion |
| 7 - 8 | Responds Satisfactorily to All relevant considerations under the criterion |
| 9 | Responds Completely, Accurately and Convincingly to All relevant considerations under the criterion |
| | |
| 10 | Response is Complete, Specific and Superior, both quantitatively and |
| | qualitatively |

24. What are the Technical and Policy Evaluation Criteria?

All proposals that pass the Completeness, Eligibility and Feasibility screening will be evaluated for merit based on the following technical and policy evaluation criteria:

1. The proposal accurately and completely describes the Scientific and Technological Baseline.

Weighting Factor: 1.0 Possible Points: 10

The proposal completely and accurately describes the current status of the subject technology to be improved by the proposed effort, including the relationship of the subject technology to the relevant performance targets in Section°I.

All entities performing work on the subject technology are identified, and the nature of their efforts is described.

The Bidder describes in detail, with substantiation, its past and current work in the subject technology. Accomplishments (not just activities), successes and failures are described.

The Scientific and Technological Baseline description is in sufficient detail to determine where the proposed effort fits in the continuum of scientific and technological development.

2. The proposal identifies Barriers, Issues, or Knowledge Gaps amenable to RD&D solutions.

Weighting Factor: 1.0 Possible Points: 10

The proposal clearly identifies, describes and quantifies the significance of barriers, issues and knowledge gaps faced by fuel cells, turbines or hybrid systems that the proposed project will address.

The proposal identifies and describes the nature and relevance of scientific or technological deficiencies.

The barriers are directly relevant and important to California.

The proposal explains why these issues have not been addressed to date.

The proposal explains why resolving these barriers is appropriate now. Of the spectrum of issues, these particular issues are most timely.

3. The project s objectives and goals have the potential to fulfill EPAG Program Objectives and the RFP s Targets and Stretch Goals.

Weighting Factor: 1.0 Possible Points: 10

The proposal lists and describes quantitative or measurable technical performance goals, and relates these to the relevant EPAG Targets and Stretch Goals in Section I, Tables 1-4.

For fuel cell projects, the Bidder has carefully completed the Performance Characteristics form (Attachment 9) showing expected values of the key parameters for a generating system resulting from the proposed project and for the commercial product. Tradeoffs among the performance parameters are clearly discussed.

The proposal lists and describes clear and significant **technical** objectives.

The methodology to be used to determine if the project objectives and goals have been achieved is fully described.

4. The Bidder's Technical Approach is fully explained and provides a convincing a expectation of significant technical results.

Weighting Factor: 1.0 Possible Points: 10

The proposal describes the scientific and technical principles underlying the proposed work effort and the manner in which the scientific and engineering principles will be applied.

The specific expected advancements in science or technology are described.

The proposal explains how and why the proposed project is the necessary next RD&D step.

Reasons are described for expecting the proposed approach to succeed and advance the EPAG objectives, especially if alternative approaches have failed.

The manner and extent to which the proposal will advance the Scientific and Technical Baseline are described.

The types of activities that will be performed are detailed.

Distinctive and innovative features of the approach are discussed.

Proprietary information necessary to complete the project is described, along with a plan for obtaining this information. Plans for resolving intellectual property concerns, if any, are described.

5. Successful completion of the proposed project will benefit California electricity ratepayers.

Weighting Factor: 2.0 Possible Points: 20

The proposal explains how the project results will fulfill market needs. References for available market studies are provided. Needed market studies are described.

The expected outcomes the effects of the anticipated project results on the fuel cell, turbine, and stakeholder communities are described. The specific users or market segments are targeted.

The proposal lists and describes quantitative or measurable **economic** impacts. Benefits such as reduced manufacturing costs, improved fuel conversion efficiency, greater reliability and durability are discussed and quantified, and related to the project objectives and goals.

The proposal lists and describes clear and significant economic objectives desired conditions outside the project itself that will result from successful completion of the project. The potential California market size is described, as well as any significant market outside California.

Potential new environmental or safety issues associated with the expected new product are described.

The subsequent steps, the time required, and the approximate cost that must be taken to lead to a commercial product are discussed.

The market connection and timeframe for accrual of the economic benefits is discussed, along with any additional activities required to realize these benefits.

A clear quantitative distinction and apportionment is made between public and private benefits.

The proposal shows that the proposed project will develop products, technologies or services that address California electricity needs.

If the project develops hardware, details of the extent of its expected use and the basis for that judgment are provided.

If the project does not develop hardware, the expected adopters and beneficiaries of the knowledge are convincingly specified.

6. The Work Statement (Exhibit A), Task Schedule (Exhibit B) and the details of the project implementation demonstrate that there is a high probability of project success.

Weighting Factor: 2.5 Possible Points: 25

The Work Statement demonstrates a clear, appropriate and complete effort.

The Work Statement is composed of a series of interconnected, logical, and discrete tasks.

Every task contains an objective. The objectives identify expected results and accomplishments.

Every task contains a description of activities. The activities are complete and clearly described. The description is in sufficient detail to be incorporated directly into a Standard Agreement.

The deliverables are appropriate, clearly identified, complete, and useful.

The Technology Transfer Plan is well defined and conceived and incorporates appropriate deliverables and methods for conveying project results to stakeholders.

The Production Readiness Plan describes the factors relevant to the production of a commercially viable product. (For projects that develop hardware).

For demonstration projects, there is a complete Test Plan.

For cogeneration projects, the market applications are identified, the cogeneration system is matched to the load, and thermodynamic calculations are included.

The Work Schedule reasonably appropriates time with respect to the sequence of tasks, time allocated per task, and the use of labor, equipment and facilities.

Appropriate milestones are identified. Critical Project Reviews are incorporated in the schedule at appropriate decision points.

7. The project cost, PIER funding request, match funding, and need for PIER funding are appropriate and consistent with the expected level of public benefits.

Weighting Factor: 2.0 Possible Points: 20

The proposal demonstrates that the total project cost is appropriate, considering: 1) the significance of the barriers being addressed, 2) the project s objectives and goals, and 3) the level of effort described in the Work Statement.

The proposal demonstrates that the amount of requested PIER funding is appropriate with respect to the level of public benefits.

The proposal demonstrates that the amount of match funding is consistent with the estimated level of private benefits. The types of match funding are acceptable.

The proposal explains why the proposed project is not adequately provided by the competitive or regulated markets, and would not occur in the absence of PIER funding.

The Bidder brings and will contribute extra value that was developed under prior projects.

8. The Detailed Budget (Attachment 8, Exhibit C) is consistent with the Work Statement and itemizes reasonable costs for personnel, subcontractors, equipment, operating expenses, fees, etc., for each task.

Weighting Factor: 1.5 Possible Points: 15

For the tasks described in the Work Statement, the Exhibit C, Budgets (Attachment 8) indicate the total project budget, the PIER reimbursable budget, and the matching funds budget, indicating all sources of funding.

The Exhibit C, Budgets are itemized in sufficient detail to justify the expenditures by task. The budgets include the information described in Section II, 18, 8, regarding personal services, subcontractors, operating expenses, fees, and total expenditures.

The budget shows that key personnel will be committed to the project for the appropriate number of hours and functions to accomplish the activities described in the Work Statement.

9. The Project Director and the Project Team are well qualified to conduct the project.

Weighting Factor: 1.5 Possible Points: 15

The proposal demonstrates that the Project Director can successfully manage the project, control cost, maintain the schedule, and report results and accomplishments in an effective manner.

The proposal convincingly demonstrates, based on education, training and past experience, that the Bidder's team is capable of conducting all technical, administrative, and budgetary functions and responsibilities.

The Bidder/project team has the financial capability and skills to assure project completion.

The resume list is complete. The resumes show that the Project Director and team members have the demonstrated capabilities and specific experience to successfully complete the project.

10. Other significant factors that increase the project s merit

Possible Bonus Points: 15

The following are examples of other significant factors that will be considered by the proposal evaluation team:

- The proposal shows that the technical approach is innovative or unique.
- The Bidder's performance on previous Commission contracts has been superior (e.g., contract goals and objectives either were achieved or the Bidder documented significant lessons learned, and the Bidder responded to Commission Contract Manager direction. Deliverables were complete and submitted on time and within budget).
- The proposed project is well-integrated with, and complementary to, other fuel cell and/or turbine RD&D efforts, such as those being funded by the US DOE, other federal government agencies, agencies from other states, the Electric Power Research Institute (EPRI), or the Gas Technology Institute (GTI).
- The degree to which the project contributes to a balanced PIER RD&D portfolio across technology types, levels of risk, and/or time to commercialization.

Summary of all evaluation scores

• Total possible points: 145, including bonus points

• Minimum passing score: 90.

25. Are There Non-Technical Preference Points?

A Bidder may qualify for up to four categories of preference points. Each qualifying Bidder with a score of 90 points or greater will receive the preference points for each applicable category. The sum of the Bidder's evaluation score and preference points will constitute the Bidder's total score. Proposals will be ranked based upon the Bidder's total score. Forms submitted for preference points should be included in Volume 1.

1. Small Business

Bidders who qualify as a State of California certified small business or who self-certify under the Federal Government statutes as a small business will receive five percent (5%) preference points based on the cost points received by the highest scored proposal, if the highest scored proposal is submitted by a business other than a certified small business. Instructions for becoming certified by the State of California as a small or disabled veteran owned business is contained in Attachment 5.1.

2. Target Area Contract Preference Request

The Target Area Contract Preference Act (Government Code Section 4530 *et seq.*) provides five percent (5%) preference points to California-based companies that perform state contract work in a distressed area. Bidders should complete Attachment 5.2 if they qualify for this preference. If you have further questions or need additional information on this matter, please contact the OSMB at (916) 323-6743.

3. Enterprise Zone Request

The Enterprise Zone Act (Government Code Section 7070, et seq.) provides preference points as an incentive for business and job development in distressed and declining areas of the State. Bidders should review Attachment 5.3 to determine if they qualify for this incentive.

4. Local Agency Military Base Recovery Act

The Local Agency Military Base Recovery Act (LAMBRA, Government Code Section 7118, et seq.) provides five percent (5%) preference points to California-based companies that perform State contract work in the LAMBRA. Bidders should review Attachment 5.4 to determine if they qualify for this preference.

IV. Administrative Information

About This Section

This section provides Bidders with information on submitting a successful proposal, definitions of important terms, sources of information, how to submit a proposal, confidential information, grounds for rejecting a proposal, and other administrative details. Every technical proposal must establish in writing the Bidder's ability to perform the RFP tasks listed in the Work Statement.

26. Is There a Deadline For Submitting a Proposal to this RFP?

All copies of your proposal must be delivered to the Commission Contract Office during normal business hours and **prior** to the date and time specified in Section I. In accordance with Public Contract Code 10344, proposals received after the specified date and time are considered late and will not be accepted. There are no exceptions to this law.

27. How Should a Proposal be Packaged and Labeled for Submittal?

Bidders must submit the original and twelve (12) copies of each volume, including if necessary, the Confidential Information. The original and copies of each volume must be in a separate, sealed envelope, labeled with the following information, depending upon the contents of the envelope:

- Volume 1 Administrative Section
- Volume 2 Technical and Cost Sections
- Volume 3 Confidential Information

All envelopes must further be labeled Request for Proposal 500-00-509 and include the title of the proposal.

28. Is There a Preferred Method for Delivery of the Proposal?

A Bidder may deliver a proposal by:

- U. S. Mail
- Personally
- Courier service

Postmark dates of mailing, E-mail and facsimile (FAX) transmissions are not acceptable in whole or in part under any circumstances.

29. What is the Address for Delivery of Proposals?

Label and deliver your proposal, in a sealed package, as follows:

Person's Name, Phone # Bidder's Name Street Address City, State, Zip Code FAX #

RFP 500-00-509

Contracts Office, MS-18 California Energy Commission 1516 - 9th Street, 1st Floor Sacramento, CA 95814

30. How is Confidential Information Treated?

From the beginning of the solicitation process until the evaluation is complete and the Notice of Proposed awards is posted, the Commission is required to hold all information received from Bidders as confidential. However, proposals and all submittals will become public record after the Commission completes the evaluation and/or scoring process and the Notice of Proposed Awards is posted.

After the posting of awards,

- confidential materials submitted by <u>unsuccessful Bidders</u> will be destroyed and/or returned. The Commission will not retain confidential submittals from unsuccessful Bidders.
- confidential materials submitted by <u>successful Bidders</u> will be kept confidential, pending incorporation of confidentiality determination as part of the subsequent PIER contract as appropriate.

A complete application for confidentiality pursuant to Title 20, California Code of Regulations, sections 2505(a) and 2505(c)(2)(A) may be required prior to DGS approval of the contract at the option of the Commission. These confidentiality specifications and procedures are issued in accordance with Title 20, California Code of Regulations, section 2505(c)(2)(A).

31. What Types of Information Are Considered Confidential?

Consistent with its confidentiality regulations, and the California Public Records Act (Government Code Section 6250 et. seq.), the Commission generally will grant confidential treatment for information that is essential to understanding the proposal, clarifies the status of technology prior to contract work, or will be a contract deliverable. Examples include:

• Any information that is patent pending (until a patent has been approved), including patent application numbers

- Technical trade secrets (e.g., detailed technical drawings)
- Marketing/business trade secrets (e.g., energy use data for an individual commercial or industrial facility, pending strategic partnerships with manufacturers)
- Economic/financial trade secrets (e.g., income tax records).

Conversely, the Commission generally will not allow confidential treatment for certain other types of information. Bidders are cautioned against seeking confidentiality for the following types of information:

- Project descriptions/work statements (including task descriptions, schedule of deliverables and due dates)
- Proposed project budgets (PIER and match fund), including labor rates
- Disabled Veterans Business Enterprise information
- Names of employees, subcontractors and match fund participants
- Test plans and reports
- Progress reports
- Final reports.

The Commission will allow technical and business trade secrets to be reported in separate confidential addenda to test reports and final reports.

32. Are There Important Administrative Details I Should Know?

Disabled Veteran Business Enterprises

This contract is subject to a participation goal of three percent (3%) for certified California Disabled Veteran Business Enterprises as set forth in Public Contract Code Sections 10115, et seq. Refer to, Attachments 4.1 — 4.3.

Bidders must provide DVBE qualifications, experience and duties to be performed under the Work Statement. Bidders shall provide DVBE project detail participation in the same manner as other subcontractors, including work descriptions, staffing and budget information.

Small Business Preference

Government Code Sections 14835, et seq., requires that a five percent (5%) preference be given to any Bidder who is certified by the State of California as a small business. A Bidder who claims this preference may include a copy of its approved certification form in the Bidder s proposal.

Under this RFP, Bidders may also qualify for the small business points under the Federal Government small business self-certification process.

Bidder s Cost

The Bidder is responsible for the cost of developing a proposal, and this cost cannot be charged to the State or the Commission.

33. Can the Commission Impose Conditions or Limits on Awards?

Yes. The Commission reserves the right to condition, modify or otherwise limit any and all PIER funding awards made pursuant to this RFP so as to avoid unnecessary duplication or overlap of efforts within a proposal or between proposals receiving PIER funding.

34. Can the Commission Cancel or Amend This RFP?

Yes, if it is in the State's best interest. The Commission reserves the right to do any of the following:

- Cancel this RFP
- Amend or revise this RFP as needed; or
- Reject any or all proposals received in response to this RFP.

35. How will I know if the RFP is Revised?

If the RFP must be changed or revised, the Commission will prepare and mail a formal written addendum to all parties who requested a copy of the RFP from the Commission Contracts Office. In addition, the addendum will be posted on the Commission's Web Site: www.energy.ca.gov/contracts and Department of General Services Web Site: www.dgs.ca.gov/cscr. The RFP cannot be revised after proposal due date.

36. What If I Find an Error in this RFP Document?

If a Bidder discovers any ambiguity, conflict, discrepancy, omission, or other error in the RFP, the Bidder shall immediately notify the Commission of such error in writing and request modification or clarification of the document. Clarifications will be given by written notice of all parties who have obtained an RFP, without divulging the source of the request for clarification. The Commission shall not be responsible for failure to correct errors.

37. Generally, What are the Contract Requirements?

Term of the Contract

The term of the contract(s) will be from October 2001 to March 31, 2006. Typically, the duration of a project is shorter than the term of the contract.

Contract Terms and Conditions

Standard Contract Terms and Conditions are included in this solicitation (Section V, Attachment 7, Terms and Conditions). It is the intention of the Commission to

use these Standard Terms and Conditions in all contracts awarded as a result of this solicitation. The content of this RFP and the Bidder's proposal will be incorporated by reference into the final contract.

Contract Cancellation

The Commission reserves the right to terminate any contract awarded through this RFP by providing a 30 day notice to the successful Bidder.

No Contract Until Signed and Approved

The proposed contract between the Commission and the successful Bidder is not in effect until the contract is signed by all of the parties, which includes approval at a Commission Business Meeting, Bidder signature, Energy Commission signature, and approval by the Department of General Services, Legal Services.

Contract Amendment

A contract executed as a result of this RFP can be amended by mutual consent of the Commission and the Contractor. The contract may require amendment as a result of project review, changes and additions, changes in project scope, or availability of funding.

Audit

The Bureau of State Audits may audit a contract awarded under this RFP up to a period of three years after the final payment or termination of the contract.

Subcontractors

Any subcontractor the Bidder chooses to use in fulfilling the requirements of this RFP that is expected to receive more than ten percent (10%) of the value of the contract, must also meet all administrative and technical requirements of this RFP. The Bidder must provide a summary of each subcontractor s qualifications, including DVBE firms, experience and duties that would be performed under the Work Statement.

The Contractor is responsible for the quality of all subcontractor work, and may only replace subcontractors as specified under the Contract Terms and Conditions.

PIER Contractors subcontracting with a private or public university may include language from the terms agreed upon by the Commission and referenced in Request for Proposal 500-98-505, Attachment 7, amended on May 8, 1998, which addresses special terms applicable to universities.

38. What If I Decide To Modify Or Withdraw My Proposal?

Withdrawal/Modification

A Bidder may, by letter to the Contract Officer, withdraw or modify a submitted proposal before the proposal deadline (due date and time) in the Schedule. Proposals cannot be changed after that date and time.

Immaterial Defect

The Commission may waive any immaterial defect or deviation contained in a Bidder s proposal. The Commission s waiver shall in no way modify the proposal or excuse the successful Bidder from full compliance.

39. How Will I Know If I Have Been Awarded A Contract?

A Notice of Proposed Awards (NOPA) will be posted for five (5) working days at the Commission s headquarters in Sacramento, and on the Commission s and the DGS web site. In addition, each Bidder will be mailed a copy of the NOPA.

Upon completion of the five (5) day notice period, contract documents will be prepared and sent to successful Bidders for their signatures. The Commission will not consider any substantive changes to the contract terms and conditions contained in this RFP. If, for any reason, a successful Bidder does not sign the contract documents within a reasonable time, the Commission may eliminate that project from its award list and select the next highest ranked project for funding.

After the awarded Bidders have signed the contract documents, the Commission will consider final approval of each contract at a publicly noticed Commission Business Meeting. The Commission at that time may approve more than one contract.

40. What Happens If My Proposal Is Unsuccessful?

After the NOPA is posted, each unsuccessful Bidder may request a debriefing meeting with the Commission Contracts Office. The debriefing meeting is an opportunity for an unsuccessful Bidder to learn why their particular proposal was not successful and may provide insight to improving proposal preparation for future solicitations.

41. What If I Want To Protest The Awards?

A Bidder may file a protest against the proposed awarding of a contract. Once a protest has been filed, contracts will not be awarded until either the protest is withdrawn, or the Commission cancels the RFP, or the Department of General Services decides the matter.

Please note the following:

- Protests are limited to the grounds contained in the California Public Contract Code Section 10345.
- During the five working days that the NOPA is posted, protests must be filed with the DGS Legal Office and the Commission Contracts Office.
- Within five days after filing the protest, the protesting Bidder must file with the DGS and the Commission Contracts Office a full and complete written statement specifying the grounds for the protest.
- If the protest is not withdrawn or the solicitation is not canceled, DGS will decide the matter. There may be a formal hearing conducted by a DGS hearing officer or there may be briefs prepared by the Bidder and the Commission for the DGS hearing officer consideration.

42. What Happens To My Proposal Documents?

On the Notice of Proposed Award date, all proposals and related material submitted in response to this RFP become the property of the State and a part of the public record, unless the Bidder has submitted an application for confidentiality.

Confidential documents submitted by unsuccessful Bidders will be returned to the Bidder or destroyed by the Commission. Contractor identified and Commission designated confidential documents will be filed separately from the rest of the proposal and contract documents. Only authorized persons will have access to these designated confidential documents.

43. Key Words and Their Definitions

Application: How a technology, once it is developed, is used to achieve a desired result or objective.

Baseline condition: The current, state-of-the-art technology or body of knowledge for a particular topic.

Bidder: Respondent to this RFP.

Commission: California Energy Commission.

Contract: The agreement signed by the Bidder and the Commission, and approved by the California Department of General Services. A contract is defined in the Public Contracts Code as an agreement or joint development agreement to provide labor, services, material, supplies, or equipment in the performance of a contract awarded for or on behalf of the State of California. The proposal

submitted by a Bidder will be included in the contract between the Bidder and the Commission.

Contract budget: The proposed Commission-reimbursable expenditures AND the Contractor's match fund expenditures for that portion of the project covered by the contract term.

Contract term: The start and end dates stated in the contract between the Commission and the Contractor. The project may be shorter than, coincide with, or extend beyond, the contract term. However, all Commission reimbursed and matched activities must occur during the contract term.

Contractor: A Bidder, after a contract with the Commission has been signed and approved.

Cooling, heating and power (CHP): Energy generation systems that involve simultaneous production of electricity or mechanical power and thermal energy (such as hot water, steam or cool air) that, when compared to separate production of electricity or mechanical power and thermal energy, achieves highly efficient fuel utilization. CHP systems are sometimes referred to as combined heat and power or cogeneration.

Critical project reviews: Meetings between the Contractor, Commission Contract Manager and other individuals selected by the Commission Contract Manager to assess whether there is satisfactory progress to justify continuation of the project.

Decision maker: An individual or organization that can use the results of a completed project for further RD&D, technology commercialization, or use.

Deliverable: A submittal to the Commission Contract Manager that demonstrates progress on, or completion of, activities or tasks described in the Bidder's Statement of Work.

Demonstration: Operation of a completed product embodying a prototype or commercial configuration of a technology for the purpose of demonstrating the attainment of project goals.

Development: Bringing into reality or activity a product embodying a commercial configuration of a technology.

DGS: State of California, Department of General Services.

Distributed Generation (DG), also referred to as **Distributed Energy Resources (DER)**: A Commission Committee has defined DG as stationary applications of electric generating technologies that are smaller than 50 MW of net generating capacity, the Energy Commission s power plant siting jurisdiction threshold. These generating installations may be owned by electric or gas utilities; industrial, commercial, institutional or residential energy consumers; or independent energy producers. They include generating technologies such as

diesel engines, fuel cells, small and micro gas turbines, solar photovoltaics (PV), and wind turbines, and may be combined with electric storage technologies such as batteries and flywheels. (Ref: Distributed Generation: CEQA Review and Permit Streamlining, California Energy Commission Energy Facility Siting and Environmental Committee, report number P700-00-019, December 2000, page 10, available at http://www.energy.ca.gov/distgen/documents.) Other entities have defined DG in different ways. For example, the California Alliance for Distributed Energy Resources (CADER), Technology Characterization Committee, described DER technology characteristics as follows: generates or stores electricity located near or at a load center, can be grid connected or isolated, has a value greater than grid power including customer value, distribution system benefits, backup or emergency power, and social or environmental value.

Economic performance objective: A degree of improvement in the capital cost, operating cost, or maintenance cost of an EPAG system expressed as an improved competitive position in the market.

End user: An entity that consumes energy, including electricity or thermal energy, or that directly generates and/or markets energy systems.

Environmentally Preferred Advanced Generation (EPAG): Super-efficient electric generation technologies using clean fuels. In determining whether a particular fuel is clean or not, consideration must be given to environmental impacts across the entire fuel cycle of the type of generation proposed (e.g., including fuel production, transportation, refinement and generation). Examples of EPAG technologies include, but are not limited to, new advanced generation cycles, fuel cells of all types, and next generation gas turbines. (Ref: *Strategic Plan for Implementing the RD&D Provisions of AB 1890*, California Energy Commission, P500-97-007, June 1997.)

Equipment is defined as having a useful life of at least one year, having an acquisition unit cost of at least \$5,000, and purchased with Commission funds. *Equipment* means any products, objects, machinery, apparatus, implements or tools purchased, used or constructed within the project, including those products, objects, machinery, apparatus, implements or tools from which over thirty percent (30%) of the equipment is composed of materials purchased for the project.

For purposes of determining depreciated value of equipment used in the contract, the project shall terminate at the end of the normal useful life of the equipment purchased, funded and/or developed with Commission funds. The Commission may determine the normal useful life of such equipment.

Goal: For the purposes of this RFP, goal is defined as an improvement in technology or the state of knowledge that can be measured and quantified.

Innovation: previously unknown, unused, or not broadly adopted combination of methods, materials, processes, or conditions.

Key personnel: Those individuals who are critical to the successful completion of the proposed project and are difficult to replace because of their experience, capabilities and knowledge.

Market connection: A key objective of the PIER program is to develop energy products or services that will be applied in the real world, and will thus produce benefits for California's electricity ratepayers. A strong connection with the market can be demonstrated by (1) identifying a specific market(s) for the products or services resulting from the RD&D efforts, (2) estimating the size of that market (and how much of that market exists in California), (3) providing an overview of the pathway(s) by which such products or services will ultimately enter the marketplace, and (4) identifying people and entities that can aid in facilitating market entry. Demonstration projects should be closely connected to the market, while fundamental research projects may have a less quantifiable market connection.

Microturbine system: For the purposes of this RFP, a microturbine system is a set of integrated equipment that comprises a rotary engine that is actuated by an aerodynamic reaction or impulse, or both, on radially or axially curved full-circumferential-admission airfoils mounted on a central axial rotating spindle. Such an engine commonly includes an air compressor, combustor, and gas pathways that lead compressed air to the combustor, and that lead hot combusted gases from the combustor to a rotating turbine spool(s), which in turn drives the compressor and power output shaft. Such an engine is rated at 350 kW or less at International Standards Organization (ISO) conditions. The microturbine system further includes all secondary components located between the existing infrastructure for power distribution. Secondary components may include the fuel compressor, recuperator/regenerator, generator or alternator, cooling-heating-and-power equipment, sound attenuation apparatus, and power conditioning equipment.

Milestone: A significant point in the performance of the project. Examples include the Critical Project Review, the completion of a task, the submittal of a deliverable, the completed installation of a piece of hardware, and the initial operation of a new system.

Objective: For this RFP, objective is defined as a desired condition outside the project itself that results from the success of the project.

Performance metric: An indicator of the performance of a product that allows the research product to be evaluated on its ability to meet the identified technical, economic and performance goals.

Private benefit: For the purposes of this RFP, private benefit is an economic return or profit that the Bidder or a member of the team acquires for its own advantage.

Program: A collection of individual projects with the same set of overall goals and objectives, wherein each project develops a unique product or service to help

achieve the overall program goals and objectives. Within a program, the individual projects are separate and their unique products or services can be developed independently, e.g., development of several different types of fuel cell technologies in a coordinated effort to achieve lower costs and higher efficiencies for fuel cells is a program; simply obtaining information (as opposed to developing a product or service) does not constitute a program.

Project: An RD&D effort intended to advance a specific science and/or technology that is guided by a set of goals and objectives and that is implemented according to a valid technical approach.

Proposal: The formal written response to this RFP from the Bidder. If the proposal is accepted by the Commission, the proposal will be included as part of the contract.

Public benefit: A project produces public benefits if it achieves one or more of the following five objectives: (1) improves energy cost or value, (2) improves the environment, public health and safety, (3) improves energy reliability, quality or sufficiency, (4) strengthens the California economy, and (5) provides consumer choice. (Ref: *California Energy Commission Five-Year Investment Plan, 2002 Through 2006, for the Public Interest Energy Research (PIER) Program, Volume* °1, Report to the California Legislature, California Energy Commission, March °1, 2001. Available at http://www.energy.ca.gov/research.)

RFP: Request for Proposal, this entire document. The competitive process of selecting Contractor (s) to provide services for the benefit of the Energy Commission.

Research: The careful, systematic, and reasonably thorough study and investigation in a particular field of knowledge, for the purpose of discovering or establishing facts or principles and developing a product or process.

Small turbine: For the purposes of this RFP, small turbines are turbines rated between 350°kW and 20°MW at International Standards Organization (ISO) conditions.

Stakeholder: An entity, such as an individual, corporation, trade organization, end user, research organization, university, regulatory body, government agency, financial organization, sponsor, or marketer that has a title, financial share, special skill or resource, mandated responsibility, or other direct interest in the undertaking to develop, enable, negotiate, deploy, or commercialize a technology.

State: State of California.

Subject technology: The body of knowledge, system component, device, generating system, manufacturing technique, material, etc. that will be improved as a result of the project proposed by the Bidder. For example, for the development of a low NOx combustor for a microturbine generator, the

combustor would be the subject technology and the microturbine generator would be the EPAG technology.

Task: A distinct research effort that includes an objective, a description of related activities, and a list of deliverables. Within this RFP, the task is the lowest level of a research effort. Multiple tasks support a project.

Team member: A stakeholder with contractual responsibilities to the Commission (i.e., the Bidder), or to the Bidder (e.g., subcontractors, consultants, etc.), associated with a project. Such team members may include, but are not limited to, microturbine manufacturers, suppliers, vendors, universities, research organizations, a National Laboratory, technology owners, industry trade organizations, and end users.

Technical performance objective: A qualitative degree of improvement in the performance of an EPAG system, component, or subsystem.

Technological baseline: The current state of-the-art or the developmental status of the subject technology to be developed, or the body of knowledge to be advanced.

Technology: The general subject area where the product or innovation would be used.

<u>V.</u> **ATTACHMENTS**

| 1 | Notice of Intention to Bid |
|-----|--|
| | Volume 1 Forms |
| 2 | <u>Application Form</u> |
| 2.1 | Executive Summary |
| 2.2 | Project Team List, Key Personnel and Subcontractors |
| 3 | Contractor Certification Clauses |
| 4.1 | Prime Bidder Certification of Disabled Veteran Owned Business Participation |
| 4.2 | List of Disabled Veteran Owned Business Participation |
| 4.3 | Documentation of good Faith Efforts |
| 5.1 | Small Business/Disabled Veteran Business Enterprise Application Instructions |
| 5.2 | Target Area Contract Preference Act Form |
| 5.4 | Local Agency Military Base Recovery Area Form |
| 5.3 | Enterprise Zone Act Preference Request Form |
| 6 | Customer References |
| | Volume 2 Forms |
| 7 | Contract Terms and Conditions |
| 8 | Contract Exhibits |
| | Exhibit A, Work Statement |
| | Exhibit B, Task Deliverables and Schedule |
| | Exhibit C, Budget |
| | Overall, PIER, Subcontractor & Match |
| | • Instructions |
| | Hourly Rates |
| | Fee Schedule |
| | Exhibit D, Contract Contacts |
| 9 | Fuel Cell system Performance Characteristics |
| | Volume 3 Confidential Information |
| | Exhibit E, Confidential and Pre-existing Intellectual Property List |

Attachment 1

Notice of Intent to Bid

PIER Environmentally Preferred Advanced Generation Solicitation RFP 500-00-509

The information you submit on this form is NOT binding. This Notice of Intent to Bid will be held confidential until the Notice of Proposed Awards is posted. Please return this form to the California Energy Commission Contracts Office by May 10, 2001.

| | Brief Project Title: | | | |
|---|---|--|----------------------|------|
| | Organization Name: | | | |
| | Address: | | | |
| | Contact Person: | Telenk | | |
| • | Title: | _ | | |
| | | | : | |
| | Project Subject Area | | | |
| | ☐ Fuel cells — please specify t | ype: | | |
| | ☐ Small turbines and microturb | ines | | |
| | ☐ Fuel cell/turbine hybrids | | | |
| | Other place specific | | | |
| • | Summary of Project Purpose, | | o more than 120 word | ls): |
| • | | | o more than 120 word | ls): |
| | | Goals and Approach (no | o more than 120 word | ls): |
| | Summary of Project Purpose, | Goals and Approach (no | Project length: | |
| | Summary of Project Purpose, Estimated Project Costs and | Goals and Approach (notes that the second se | | |
| | Summary of Project Purpose, Estimated Project Costs and Total PIER Funds Requested | Goals and Approach (notes that the second se | | |
| | Summary of Project Purpose, Estimated Project Costs and Total PIER Funds Requested Total Matching Funds Provided | Goals and Approach (notes that the second se | | |
| • | Estimated Project Costs and Total PIER Funds Requested Total Matching Funds Provided Total Project Cost | Coals and Approach (notes that the second se | Project length: | |

Attachment 2 Application and Program Information Form

PIER Environmentally Preferred Advanced Generation Solicitation RFP 500-00-509

This document provides the Energy Commission with basic information about your business and project to help us process your proposal. This attachment must be signed and submitted with each proposal.

| 1. | Bidder In | formation | | | | |
|-------|---------------|---------------------------------------|------------|--------------|---------------|--------------|
| Full | Legal Nam | e of Bidder | | | | |
| Bus | iness Addre | (Street number and name | e) | | (Mail stop/su | nite number) |
| | ((| City) | (County) | | (State) | (Zip code) |
| Natı | ure of Busin | ness Activity | | | | |
| Con | tact Person | | | Telephone | | |
| Title | e | | | FAX | | |
| Org | anization Ta | ax ID Number | | E-mail | | |
| Brie | ef Project Ti | nformation tle ite Location | | | | |
| 3. | | ocus Area ells - please specify type: | | | | |
| | ☐ Small | turbines and microturbines | | | | |
| | Fuel c | ell/turbine hybrids | | | | |
| | Other | - please specify: | | | | |
| 4. | Project C | osts and Requested Fundin | ng | | | |
| | | PIER Funding Requested | Match Fund | ing Provided | Projec | t Cost |
| | Year 1 | | | | | |
| | Year 2 | | | | | |
| | Year 3 | | | | | |
| | Year 4 | | | | | |
| | Totals | | | | | |

| 5. | Expected Duration of Project/Contract |
|------|--|
| Lei | ngth of proposed project (contract) to be done using PIER funds: months. |
| If t | he PIER-funded project is part of a larger effort being undertaken by the bidder: |
| | Start date of larger effort: (month/year). Estimated end date: (month/year). |
| 6. | Type of PIER funding being requested (Please check only one.)* |
| | ☐ PIER funds <u>with</u> royalty provisions ☐ PIER funds <u>without</u> royalty provisions |
| | Bidders should carefully read this solicitation (Royalty Requirements and Exemption Option for ER) before checking either of the boxes. If neither box is checked, the Commission will assume that the lder is selecting PIER funds with royalty provisions. |
| 7. | Type of Entity or Business Organization |
| Nu | mber of employees Year established |
| Но | w long under current ownership Legal form of organization (check one): |
| | ☐ Sole Proprietorship ☐ Corporation ☐ LLC |
| | General Partnership Sub-Chapter S Corporation |
| | Limited Partnership Other (describe) |
| | Corporation, please include Articles of Incorporation immediately following this Attachment. Partnership, include Partnership Agreement. If Sole Proprietorship, include Fictitious Name Filing. |
| 8. | Small Business Preference Claim |
| Do | es your organization qualify as a small business under the Federal Self-Certification regulations? |
| | ☐ No ☐ Yes Federal Self-Certification |
| | Annual Receipts: \$ Standard Industrial Classification (SIC) Code: |
| • | your organization certified as a small business by the State of California, or have you applied for tification? |
| | ☐ No ☐ Yes State Certification |
| | Already certified(date) |
| | Application submitted to Office of Small Business Certification and Resources |
| | (date) |
| 9. | Management and Ownership Information (Add sheets if necessary.) |
| | ase list key officers and managers of the bidder organization. |
| | me Title Years with organization |

| | | the bidder organization. For punent of the business and/or own | | |
|--------------|------------|---|----------------------------------|-----------------------|
| Shareholder/ | Partner (I | ndicate General or Limited) | % Ownership | SS# |
| | | | | |
| | | | | |
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| | | | | |
| | | | | |
| 10 Finan | oial/Log | al Uistawy | | |
| | Ü | al History | a pravida a datailad avplanati | ion |
| | - | either of these questions, pleas | e provide a detailed explanati | ion. |
| YES | NO | Has your organization, or yo defaulted on any debts? | u as a sole proprietor, ever fil | led bankruptcy or |
| | | Is your organization, or you | as a sole proprietor, a party to | any claim or lawsuit? |
| 11. Disabl | led Vete | eran Business Participation | Acknowledgement | |
| obligations | in regard | read and understand the required to DVBE. I also understand the my proposal to be rejected before | at failure to meet the requirer | |
| | ES | □ NO | | |
| 12. Confid | dentialit | ty Requests | | |
| Are you sul | omitting a | any confidential material under | a separate cover (Volume 3) | ? |
| ☐ Ye | es (See S | ections II and IV of RFP.) | □ No | |
| | | | | |
| 13. Projec | et Abstr | act (no more than 250 words) | | |
| | | | | |
| | | | | |

14. Authorization and Certification

I hereby authorize the California Energy Commission to make any inquiries and obtain any financial information necessary to evaluate my organization s capability to supply the necessary financial support to the proposed project. In addition, I authorize the California Energy Commission to make any necessary inquiries to verify the information I have presented.

I hereby certify to the best of my knowledge and belief that I have read and understand the terms and conditions contained in this RFP package and that the information contained in this proposal is correct and complete.

| Signature of Authorized Representative | Date |
|--|-------|
| Typed Name | Title |

Attachment 2.1

Executive Summary Form

PIER Environmentally Preferred Advanced Generation Solicitation RFP 500-00-509

Prepare an Executive Summary of the project (no longer than two [2] pages), which describes:

- 1. The problem, barrier, or deficiency, amenable to an RD&D solution that the proposed project will address in relationship to other current work in the field.
- 2. The technology or science being developed and advanced.
- 3. The technical approach and project steps that explain what will be done and how it will be done.
- 4. The unique products, services or levels of understanding that are expected to result from the project.
- 5. The quantitative **technical** and **economic** goals and objectives of the project.
- 6. The overall project cost; the amount of PIER funding being requested; and the amount, sources and nature of match funding.
- 7. The types, estimated amounts and timing of public benefits to be provided if the project is successful and if the results are incorporated into commercial products. (Public benefits include, but are not limited to, the annual amount of electrical energy to be saved, the amount of electrical power price reduction expected, the tons per year of pollutants reduced, the installed capacity of EPAG generators in a specified future year, and/or the degree to which system reliability or power quality is enhanced.)
- 8. Estimated amounts of additional time and spending, if any, required to realize the public benefits that are being claimed for this project. Identify the types of entities that would be involved in these additional efforts.

Attachment 2.2

RFP 500-00-509

PROGRAM TEAM LIST

| Program Team Director: |
|------------------------|
| Key Personnel: |
| DVBE: |
| Element Leads: |

ATTACHMENT 3 RFP 500-00-509 CERTIFICATION CLAUSES

I, the official named below, CERTIFY UNDER PENALTY OF PERJURY that I am duly authorized to legally bind the prospective Contractor to the clause(s) listed below. This certification is made under the laws of the State of California.

| Contractor/Bidder Firm Name (Printed) | | Federal ID Number | |
|--|---------------------------|-------------------|--|
| By (Authorized Signature) | | | |
| Printed Name and Title of Person Signing | | | |
| Date Executed | Executed in the County of | | |

CONTRACTOR CERTIFICATION CLAUSES

- 1. <u>STATEMENT OF COMPLIANCE</u>: Contractor has, unless exempted, complied with the nondiscrimination program requirements. (GC 12990 (a-f) and CCR, Title 2, Section 8103) (Not applicable to public entities.)
- 2. <u>DRUG-FREE WORKPLACE REQUIREMENTS</u>: Contractor will comply with the requirements of the Drug-Free Workplace Act of 1990 and will provide a drug-free workplace by taking the following actions:
- a. Publish a statement notifying employees that unlawful manufacture, distribution, dispensation, possession or use of a controlled substance is prohibited and specifying actions to be taken against employees for violations.
- b. Establish a Drug-Free Awareness Program to inform employees about:
- 1) the dangers of drug abuse in the workplace;
- 2) the person's or organization's policy of maintaining a drug-free workplace;
- 3) any available counseling, rehabilitation and employee assistance programs; and,
- 4) penalties that may be imposed upon employees for drug abuse violations.
- c. Every employee who works on the proposed Agreement will:
- 1) receive a copy of the company's drug-free workplace policy statement; and,
- 2) agree to abide by the terms of the company's statement as a condition of employment on

theAgreement.

Failure to comply with these requirements may result in suspension of payments under the Agreement or termination of the Agreement or both and Contractor may be ineligible for award of any future State agreements if the department determines that any of the following has occurred: (1) the Contractor has made false certification, or violated the certification by failing to carry out the requirements as noted above. (GC 8350 et seq.)

- 3. <u>NATIONAL LABOR RELATIONS BOARD CERTIFICATION</u>: Contractor certifies that no more than one (1) final unappealable finding of contempt of court by a Federal court has been issued against Contractor within the immediately preceding two-year period because of Contractor's failure to comply with an order of a Federal court which orders Contractor to comply with an order of the National Labor Relations Board. (PCC 10296) (Not applicable to public entities.)
- 4. <u>UNION ORGANIZING</u> Contractor hereby certifies that no request for reimbursement, or payment under this agreement, will seek reimbursement for costs incurred to assist, promote or deter union organizing.

By signing this agreement, Contractor hereby acknowledges the applicability of Government Code Section 16645 through 16649 to this agreement and agrees to the following:

- a) Contractor will not assist, promote or deter union organizing by employees performing wor on a state service contract, including a public works contract.
- b) No state funds received under this agreement will be used to assist, promote or deter union organizing.
- c) Contractor will not, for any business conducted under this agreement, use any state property to hold meetings with employees or supervisors, if the purpose of such meetings is to assist promote or deter union organizing, unless the state property is equally available to the general public for holding meetings.
- d) If the Contractor incurs costs, or makes expenditures to assist, promote or deter union organizing, Contractor will maintain records sufficient to show that no reimbursement from state funds has been sought for these costs, and that Contractor shall provide those records to the Attorney General upon request.

DOING BUSINESS WITH THE STATE OF CALIFORNIA

The following laws apply to persons or entities doing business with the State of California.

1. <u>CONFLICT OF INTEREST</u>: Contractor needs to be aware of the following provisions regarding current or former state employees. If Contractor has any questions on the status of any person rendering services or involved with the Agreement, the awarding agency must be contacted immediately for clarification.

Current State Employees (PCC 10410):

- 1). No officer or employee shall engage in any employment, activity or enterprise from which the officer or employee receives compensation or has a financial interest and which is sponsored or funded by any state agency, unless the employment, activity or enterprise is required as a condition of regular state employment.
- 2). No officer or employee shall contract on his or her own behalf as an independent contractor with any state agency to provide goods or services.

Former State Employees (PCC 10411):

- 1). For the two-year period from the date he or she left state employment, no former state officer or employee may enter into a contract in which he or she engaged in any of the negotiations, transactions, planning, arrangements or any part of the decision-making process relevant to the contract while employed in any capacity by any state agency.
- 2). For the twelve-month period from the date he or she left state employment, no former state officer or employee may enter into a contract with any state agency if he or she was employed by that state agency in a policy-making position in the same general subject area as the proposed contract within the 12-month period prior to his or her leaving state service.

If Contractor violates any provisions of above paragraphs, such action by Contractor shall render this Agreement void. (PCC 10420)

Members of boards and commissions are exempt from this section if they do not receive payment other than payment of each meeting of the board or commission, payment for preparatory time and payment for per diem. (PCC 10430 (e))

- 2. <u>LABOR CODE/WORKERS' COMPENSATION</u>: Contractor needs to be aware of the provisions which require every employer to be insured against liability for Worker's Compensation or to undertake self-insurance in accordance with the provisions, and Contractor affirms to comply with such provisions before commencing the performance of the work of this Agreement. (Labor Code Section 3700)
- 3. <u>AMERICANS WITH DISABILITIES ACT</u>: Contractor assures the State that it complies with the Americans with Disabilities Act (ADA) of 1990, which prohibits discrimination on the basis of disability, as well as all applicable regulations and guidelines issued pursuant to the ADA. (42 U.S.C. 12101 et seq.)
- 4. <u>CONTRACTOR NAME CHANGE</u>: An amendment is required to change the Contractor's name as listed on this Agreement. Upon receipt of legal documentation of the name change the State will process the amendment. Payment of invoices presented with a new name cannot be paid prior to approval of said amendment.

5. CORPORATE QUALIFICATIONS TO DO BUSINESS IN CALIFORNIA:

- a. When agreements are to be performed in the state by corporations, the contracting agencies will be verifying that the contractor is currently qualified to do business in California in order to ensure that all obligations due to the state are fulfilled.
- b. "Doing business" is defined in R&TC Section 23101 as actively engaging in any transaction for the purpose of financial or pecuniary gain or profit. Although there are some statutory exceptions to taxation, rarely will a corporate contractor performing within the state not be subject to the franchise tax.
- c. Both domestic and foreign corporations (those incorporated outside of California) must be in good standing in order to be qualified to do business in California. Agencies will determine whether a corporation is in good standing by calling the Office of the Secretary of State.
- 6. <u>RESOLUTION</u>: A county, city, district, or other local public body must provide the State with a copy of a resolution, order, motion, or ordinance of the local governing body which by law has authority to enter into an agreement, authorizing execution of the agreement.

- 7. <u>AIR OR WATER POLLUTION VIOLATION</u>: Under the State laws, the Contractor shall not be: (1) in violation of any order or resolution not subject to review promulgated by the State Air Resources Board or an air pollution control district; (2) subject to cease and desist order not subject to review issued pursuant to Section 13301 of the Water Code for violation of waste discharge requirements or discharge prohibitions; or (3) finally determined to be in violation of provisions of federal law relating to air or water pollution.
- 8. <u>PAYEE DATA RECORD FORM STD. 204:</u> This form must be completed by all contractors that are not another state agency or other government entity.

500 00 500

ATTACHMENT 4.1

STATE OF CALIFORNIA

CALIFORNIA ENERGY COMMISSION Contracts Office

PRIMEBIDDER'S CERTIFICATION OF DISABLED VETERAN-OWNED BUSINESS PARTICIPATION

I hereby certify that I have made a diligent effort to ascertain the facts with regard to the representations

See Instructions on Reverse

I hereby certify that I have made a diligent effort to ascertain the facts with regard to the representations made herein and, to the best of my knowledge and belief, each firm set forth in this bid as a disabled veteran business enterprise complies with the relevant definition set forth in Section 1896.62(d) of Title 2, California Code of Regulations hereof.

In making this certification, I am aware of Section 12650 et seq. of the Government Code providing for the imposition of treble damages for making false claims against the State, and Section 10115.10 of the Public Contract Code making it a crime for intentionally making an untrue statement in this certificate.

| COMPANY NAME/BIDDER (Please type or print) | RFP # |
|--|--|
| BIDDER'S SIGNATURE | DATE SIGNED |
| PRINTED NAME OF PERSON SIGNING | TITLE OF PERSON SIGNING (Business Owner/Chief Executive Officer) |

NOTE: If DVBE participation is proposed, this form must be completed and signed by the bidder or the proposal will be rejected.

| Bidder's Certification of I | OVBE Participation | - Attachment 4. | 1 |
|-----------------------------|--------------------|-----------------|---|
|-----------------------------|--------------------|-----------------|---|

If the bidder is proposing to meet the DBVE participation goal, the bidder must sign a certification that each firm listed on Attachment 4.2 meets the legal definition of DVBE and the bidder is aware of the penalties for fraud

- o Company Name legal company name of prime bidder.
- o Bidder's Signature person authorized (CEO) to sign.
- o Printed Name printed name of person who signed.
- o Title title of person signing Business Owner, Chief Executive Officer, Manager.

Only the company (bidder) submitting the proposal must sign this certification.

CALIFORNIA ENERGY COMMISSIC Contracts Off

LIST OF DISABLED VETERAN OWNED BUSINESS PARTICIPATION

| (1) Company Name | (2) Nature of Work | (3) Contracting With | (4) TIER | (5) Claimed 2) DVBE Value % | (6) Certification Letter from OSMB Attache |
|---------------------|-----------------------|-------------------------|-------------|-----------------------------------|--|
| | | | | | |
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| | | | | | |
| | | | | | |
| TOTAL | | | | % | |

NOTE: If proposing participation goals, this form must be completed or your proposal will be rejected. See instructions on reverse of this form of the RFP.

ATTACHMENT 4.2 RFP 500-00-509

DVBE Participation List —Attachment 4.2

If the participation goals are partially or fully met, Attachment 4.2 must be completed detailing the type of work, the companies (subcontractors and vendors) proposed for DVBE participation, and all other related information.

- Col. 1 DVBE company name each DVBE company must be certified by or have submitted Attachment 4 (application for DVBE certification) to OSBCR by the proposal due date.
- Col. 2 Nature of Work Type of Expertise, Technology, Service, Supplier, etc.
- Col. 3 Contracting with Company name that the DVBE company is contracting with. For example, the bidder may be contracting with a company (XYZ, Inc.) who deals with a DVBE. Then XYZ, Inc. would be entered in Column 3.
- Col. 4 Tier Contracting tier according to the following:
 - 0 = Bidder;
 - 1 = Primary subcontractor/supplier;
 - 2 = Subcontractor/supplier of Level 1 subcontractor/ supplier;
 - 3 = Subcontractor/supplier of Level 2 subcontractor/ supplier.
- Col. 5 Claimed DVBE, % value.

Percent of contract dollars committed to the DVBE listed. This percentage is the amount that will be paid to each DVBE company/vendor from the contract funds.

NOTE: This percentage is not the ownership of the company.

Col. 6 - Certification Letter attached.

This column is a checkpoint for you to ensure that all of the DVBE certification letters are in your proposal. If a certification letter is omitted, that DVBE company cannot be counted towards meeting the goals.

DVBE certification approval letter or a copy of the DVBE Application must be included in the proposal. DVBEs must be certified by the time of contract award in order to count in the participation goals.

You must clearly identify in the Work Statement, Tasks & Budget what services will be provided and the costs related to each DVBE.

ATTAC HMENT 4.3 RFP 500-00-509

STATE OF CALIFORNIA

CALIFORNIA ENERGY COMMISSION Contracts Office

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| Section 1. | ORGANIZATION CONTA | 2TO |
|------------|--------------------|-----|
| Section 1. | | |

List below the contacts made in an effort to identify potential DVBEs for participation in this contract. Include dates, times (if known), contact names and phone numbers.

| Agency | Name | Phone | Date/Time |
|-------------------------|------|----------------|-----------|
| A. CA Energy Commission | | (916) 654-4392 | |
| B. Other State Agencies | | | |
| | | | |
| | | | |
| C. DVBE Organizations | | | |
| | | | |
| | | | |
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Section 2. ADVERTISING

List the trade papers and DVBE focused papers in which you advertised for participation in this contract. Include the dates of advertisement.

| Trade | Ad Date | Publication Name | Copy Attached | |
|-------|---------|------------------|---------------|--|
| | | | | |

NOTE: If your proposal does not meet the 3% disabled veteran participation goal, this form must be completed to meet "Good Faith Efforts." These are the minimum requirements, therefore failure to fully complete <u>each</u> section of this form will result in rejection of the proposal as nonresponsive.

Attachment 4.3 Continued

ection 3. DVBEs CONSIDERED

- A. Attach Solicitation Sample or Phone Conversation.
- B. List DVBEs that you contacted for participation in this contract along with the dates you sent the solicitations or called them.
- C. List DVBEs that you considered for participation in this contract and state the reasons the DVBEs were not selected.

| Date Contacted | Name of Company | Nature of Work | Reason Considered But Not Selected | Date |
|----------------|-----------------|----------------|------------------------------------|------|
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| | | | | |

NOTE: If your proposal does not meet the 3% disabled veteran participation goal, this form must be completed to meet "Good Faith Efforts." These are the minimum requirements, therefore failure to fully complete each section of this form will result in rejection of the proposal as nonresponsive.

ATTAC HMENT 4.3 (CONTINUED) INSTRUCTIONS FOR ATTACHMENT 4.3 DOCUMENTATION OF GOOD FAITH EFFORTS

If a bidder's proposal does not meet the participation goals, then the bidder must document its "good faith effort" to meet the participation goals. The minimum requirements for meeting good faith documentation under the law are CONTAINED in Attachment 4.3, therefore each item in Attachment 4.3 must be accomplished and documented. (Public Contract Code Part 10115.2) IF THE PROPOSAL DOES NOTMEETTHE 3% DVBEPARTICIPATION THEN, FAILURE TO PERFORM, COMPLETE AND SUBMIT ATTACHMENT 5.3 WILL BE CAUSE FOR REJECTION OF THE FINAL PROPOSAL AS NONRESPONSIVE TO THE GOOD FAITH EFFORTS REQUIREMENT.

Information is available at:

DGS-DVBE Resources Packet —www.osmb.dgs.ca.gov/scrp/resource.pdf —916-322-5060

Part 1 - ORGANIZATION CONTACTS

List each contact by date, time, name, and phone number. Each bidder is required at a minimum to undertake steps A, B, C, and D, and to document all efforts under each step. [Public Contract Code Part 10115.2 (b)]. The purpose of making each of these contacts is to obtain the resources/contact groups who can refer you to or provide you with lists of DVBEs.

The DVBE list available from DGS consists of commodities and services (including consultant services).

Part 2 - ADVERTISING

Advertising is required as part of the good faith effort documentation.

- o Advertising must be made in at least two publications: one trade (e.g., work being performed in the project and reimbursed by the Commission) and one DVBE focused.
- o Both advertisements must appear not less than 14 calendar days prior to bid proposal submittal date, to allow reasonable time for consideration of DVBEs.
- o The advertisements for DVBE (including names of publications, dates of advertisement and copies of advertisements) must be documented in the bidder's proposal.

NOTE: General circulation newspapers such as the Los Angeles Times or the Sacramento Bee are not acceptable, since neither one qualifies as a trade or focus publication.

Part 3 - DVBE S RESPONDING AND CONSIDERED

List and identify each DVBE that was contacted and state the reason why they were not selected. DVBE businesses considered must have appropriate qualifications for the work to be performed in the project.

DVBE participation is not limited to any specific portion of the project work. Participation may be from technical firms, but it may also come from nontechnical firms that are part of your daily business operations such as travel agencies, stationary supplies, delivery companies, etc.

NOTE: The bidder must make actual contact with DVBEs. Services provided by DBVEs must be a reimbursable item under the project.

A .. 4 2 /D 2 C2\

ATTACHMENT5.1

SMALL BUSINESS AND DVBE CERTIFICATION INSTRUCTIONS

The OSBCR address and phone for Small Business Preference and DVBE information is:

Department Of General Services
Office of Small Business Certification and Resources
1531 I Street, 2nd Floor
Sacramento, CA 95814-2016
Phone No.: (916) 322-5060

Small Business Certification

In order to receive Small Business Preference, Bidder must either be certified by the State Department of General Services, Office of Small Business Certification and Resources (OSBCR) as a small business, or be self-certified pursuant to the Federal Government.

DVBE Certification

- o Each DVBE firm listed on Attachment 5.2 must be formally certified as a DVBE by OSBCR. The DVBE program is <u>not</u> a self-certification program. DVBE certification must be approved by OSBCR by the notice of award date of the contract to be counted in meeting participation goals.
- o A copy of the certification letter approved by, or a copy of the certification form submitted to OSBCR <u>must</u> be included in the proposal package.

To qualify as a DVBE, the DVBE must:

- 1) Be a California resident;
- 2) Own 51% of the firm and meet the requirements: in 3) and 4) below.
- Provide to the OSBCR, by no later than 5:00 p.m. on the date on which the proposal is due, an Award of Entitlement from the United States Department of Veterans Affairs or the United States Department of Defense, issued within 6 months of the date on which certification is sought, which would certify or declare the existence of a service-connected disability, of at least 10 percent, at the time of application for or renewal of certification as a DVBE, and
- 4) Meet all requirements set forth in Article 6 (commencing with Section 999) of Chapter 6, Division 4 of the California Military code.

The Internet addresses are:

OSBCR Homepage: http://www.dgs.ca.gov/osbcr

This internet site provides general information about the DVBE program and certification process.

DVBElist: http://www.dgs.ca.gov/osbcr/dvbe/dvbe.htm

OSBCR maintains a list of certified DVBEs. The list is separated into three main subject areas: Commodities, Construction, and Services. Within each subject area, there are more specific areas of expertise. The Energy Commission does not have separate DVBE lists.

TARGET AREA CONTRACT PREFERENCE ACT (TACPA) REQUEST

SECTION 1: SOLICITATION INFORMATION

| | ' | • | | • | •••• | |
|-------------|---|-------|------|---|------|--|
| BID NUMBER | | | | | | |
| AGENCY/DEPT | | | | | | |

This request form should be completed by bidders wishing to apply for TACPA preferences for this solicitation.

See reverse for program description and instructions for completing this form.

SECTION 2: REQUEST FOR 5% WORKSITE PREFERENCE List the bidding firm and all suppliers and subcontractors who will work with the bidder to fulfill the terms of the contract. Indicate those firms for which the bidder is requesting worksite preference eligibility by providing the requested information. Attach additional pages if needed

| NAME OF FIRM | | FIRM'S ROLE IN THIS BID (Examples: Bid | | Complete if requesting Worksite Preference: | | | |
|---|--|---|---|--|---|-------------------|-----------------------------|
| | | | | | • | | |
| STREET ADDRESS | CITY | STATE | ZIP CODE | LABOR HOURS ESTIMATED | BLOCK NUMBER | TRACT NUMBER | CRITERIA (A - F) |
| NAME OF FIRM | | FIRM'S ROLE IN THIS BID (Examples: Bid | der, Manufacture | er, Shipper, etc.) | Complete if re | questing Works | site Preference: |
| STREET ADDRESS | CITY | STATE | ZIP CODE | LABOR HOURS ESTIMATED | BLOCK NUMBER | TRACT NUMBER | CRITERIA (A - F) |
| NAME OF FIRM | | FIRM'S ROLE IN THIS BID (Examples: Bid | der, Manufacture | er, Shipper, etc.) | Complete if re | questing Works | site Preference: |
| STREET ADDRESS | CITY | STATE | ZIP CODE | LABOR HOURS ESTIMATED | BLOCK NUMBER | TRACT NUMBER | CRITERIA (A - F) |
| NAME OF FIRM | | FIRM'S ROLE IN THIS BID (Examples: Bid | der, Manufacture | er, Shipper, etc.) | Complete if re | questing Works | site Preference: |
| STREET ADDRESS | CITY | STATE | ZIP CODE | LABOR HOURS ESTIMATED | BLOCK NUMBER | TRACT NUMBER | CRITERIA (A - F) |
| NAME OF FIRM | | FIRM'S ROLE IN THIS BID (Examples: Bid | der, Manufacture | er, Shipper, etc.) | Complete if re | questing Works | site Preference: |
| STREET ADDRESS | CITY | STATE | ZIP CODE | LABOR HOURS ESTIMATED | BLOCK NUMBER | TRACT NUMBER | CRITERIA (A - F) |
| NAME OF FIRM | | FIRM'S ROLE IN THIS BID (Examples: Bid | der, Manufacture | er, Shipper, etc.) | Complete if re | questing Works | site Preference: |
| STREET ADDRESS | CITY | STATE | ZIP CODE | LABOR HOURS ESTIMATED | BLOCK NUMBER | TRACT NUMBER | CRITERIA (A - F) |
| NAME OF FIRM | | FIRM'S ROLE IN THIS BID (Examples: Bid | der, Manufacture | er, Shipper, etc.) | Complete if re | questing Works | site Preference: |
| STREET ADDRESS | CITY | STATE | ZIP CODE | LABOR HOURS ESTIMATED | BLOCK NUMBER | TRACT NUMBER | CRITERIA (A - F) |
| NAME OF FIRM | | FIRM'S ROLE IN THIS BID (Examples: Bid | der, Manufacture | er, Shipper, etc.) | Complete if re | questing Works | site Preference: |
| STREET ADDRESS | CITY | STATE | ZIP CODE | LABOR HOURS ESTIMATED | BLOCK NUMBER | | CRITERIA (A - F) |
| SECTION 3: REQUEST FOR 1% - 4% W | ORKFORCE PREFERE | NCE HO | TOTAL LABOR JRS ESTIMATEI | | | | |
| I request a 1% preference for hiring eligibl | • | | | | | | |
| I request a 2% preference for hiring eligibl | | | | | | | |
| I request a 3% preference for hiring eligibl | · | | | | | | |
| ☐ I request a 4% preference for hiring eligibl | e persons to perform 20% of | or more of the total contract lab | or hours | | | | |
| SECTION 4: CERTIFICATION | | | | | | | |
| I hereby certify under penalty of perjury, that (1) the a contract for goods, or 90% of the labor hours requpreference, the bidder shall hire persons with a high complete. Any person falsely certifying, willfully proveligibility. | lired to perform a contract for some risk of unemployment to perfo | services shall be performed at the earm the required contract labor houng information, or failing to comply were supported to the comp | ligible distress is as requested with the TACPA | sed area worksite(s) claimed i d in Section 3, and (4) all info | n Section 2, (3) if a rmation provided in | applying for work | force true, correct, and |
| BIDDER'S SIGNATURE | | PRINTED C | R TYPED NAME | | | | |
| TITLE | AREA CODE & | PHONE NUMBER | | DATE EXECUTED | | | |

TARGET AREA CONTRACT PREFERENCE ACT (TACPA) REQUEST

STD 830 (NEW. 5-99)

Program Description

The intent of the Target Area Contract Preference Act (TACPA) is to promote economic development and employment opportunities in distressed areas of the state by offering bidding preferences on qualified solicitations.

TACPA provides for two preferences: Worksite and Workforce.

Worksite Preference: Bidders may be eligible for a 5% bid preference on state goods and services contracts valued at more than \$100,000 if the worksite is located in a distressed area as designated by the State Office of Planning and Research.

TACPA allows state contracting officials to award the worksite preference when 50% of the labor hours required to manufacture the goods and to perform a contract for goods, or 90% of the labor hours required to perform a contract for services is performed at the approved worksites.

Workforce Preference: Companies qualifying for the 5% worksite preference may request an additional 1% - 4% workforce preference by certifying to hire a specified percent of their contract workforce from employees who are at high risk of unemployment as defined in California Government Code, Section 4532(f).

To request workforce preference, the bidder must first identify an eligible worksite.

TACPA bid preferences do not apply to contracts in which the worksite is fixed.

For more detail, see California Government Code, Section 4530 et seq. and California Code of Regulations, Title 2, Section 1896.30.

Other Bidding Preference Programs

In addition to TACPA, the State has other bidding preference programs for which you might qualify:

EZA - Enterprise Zone Act (up to a 9% bidding preference)

LAMBRA - Local Agency Military Base Recovery Area Act (up to a 9% bidding preference)

Small Business - Certified small businesses in California can receive a 5% bidding preference.

A non-certified small business that claims any combination of EZA, TACPA or LAMBRA preferences cannot use these preferences to displace a certified small business.

How the Bidding Preference Works

The TACPA bidding preference that you qualify for is used only for bid solicitation purposes, to a maximum of \$50,000. The preference does not alter the amount of the resulting contract.

If you qualify for more than one bidding preference (EZA, TACPA, LAMBRA, Small Business) the maximum preference allowed by law is 15% or \$100,000.

Reporting Requirements

Firms receiving TACPA preferences must report their labor hours. Reference the state contract on which you are bidding for specific reporting requirements.

How to Identify TACPA Locations

Contact the appropriate city or county planning and development office or your local Area Council of Governments and ask for the Census Tract and Block Group numbers for the firm or firms for which you are requesting worksite preference.

Then, contact the State of California, Department of General Services, Office of Small Business Certification and Resources at (916) 323-5478 and ask for the TACPA coordinator. The coordinator will tell you if the worksite is eligible.

Instructions for completing "Target Area Contact Preferences Act (TACPA) Request" on Reverse

Section 1: Enter the solicitation number and the name of the state department or agency offering the solicitation.

Section 2: Enter the requested information for 1) the bidding firm, and 2) all firms with whom the bidder will be subcontracting to perform the work required to complete this bid. You must list all firms, including the manufacturer, if applicable, not just those requesting worksite preference.

Firm's role in this bid: Enter the appropriate description indicating what job the listed firm will perform.

Tract and Block Numbers: See instructions above on how to obtain tract and block numbers.

Labor Hours Estimated: For each firm listed, estimate the total labor hours to be performed. Total the estimated hours for each firm and enter them into the box labeled "Total Labor Hours Estimated"

Criteria:

- A: The firm is located in a California eligible distressed area.
- B: The firm will establish a worksite in a California eligible distressed area.
- C: MAP REQUIRED. The firm is located in a census tract block that, when attached to an eligible distressed area, forms a contiguous boundary. If you enter "C", you must attach a map showing the relationship of the requested area to the distressed area.
- D: MAP REQUIRED. The firm will establish a worksite located in a census tract block that, when attached to an eligible distressed area, forms a contiguous boundary. If you enter "D", you must attach a map showing the relationship of the requested area to the distressed area.
- E: GOODS ONLY. The firm will purchase the contract goods from a manufacturer located in an eligible distressed area.
- F: GOODS ONLY/MAP REQUIRED. The firm will purchase contract goods from a manufacturer located in a census tract block that, when attached to a distressed area, forms a contiguous boundary. If you enter "F", you must attach map showing the relationship of the requested area to the distressed area.
- **Section 3:** Select the appropriate box, indicating the percentage of workforce preference you are requesting. To request workforce preference, the bidder must first identify an eligible worksite.

Section 4: The Bidder must complete and sign the Certification.

ENTERPRISE ZONE ACT (EZA) PREFERENCE REQUEST

STD 831 (NEW. 5-99)

AGENCY/DEPT.

SECTION 1: SOLICITATION INFORMATION BID NUMBER

This request form should be completed by bidders wishing to apply for EZA preferences for this solicitation.

See reverse for program description and instructions for completing this form.

SECTION 2: REQUEST FOR 5% WORKSITE PREFERENCE List the bidding firm and all suppliers and subcontractors who will work with the bidder to fulfil the terms

| of the contract. Indicate those firms | s for which the bidder is requesting worksite pre | | | | ach additional pages if need | |
|--|---|---------------------------------|------------------|-----------------------|------------------------------|---------------------|
| NAME OF FIRM | FIRM'S ROLI | E IN THIS BID (Examples: Bidder | Manufacturer, Sh | nipper, etc.) | Complete if requesting W | orksite Preference: |
| STREET ADDRESS | CITY | STATE | ZIP CODE | LABOR HOURS ESTIMATED | ENTERPRISE ZONE NAME | CRITERIA (A - C) |
| NAME OF FIRM | FIRM'S ROLI | E IN THIS BID (Examples: Bidder | Manufacturer, Sh | nipper, etc.) | Complete if requesting W | orksite Preference: |
| STREET ADDRESS | CITY | STATE | ZIP CODE | LABOR HOURS ESTIMATED | ENTERPRISE ZONE NAME | CRITERIA (A - C) |
| NAME OF FIRM | FIRM'S ROLI | E IN THIS BID (Examples: Bidder | Manufacturer, Sh | nipper, etc.) | Complete if requesting W | orksite Preference: |
| STREET ADDRESS | CITY | STATE | ZIP CODE | LABOR HOURS ESTIMATED | ENTERPRISE ZONE NAME | CRITERIA (A - C) |
| NAME OF FIRM | FIRM'S ROLI | E IN THIS BID (Examples: Bidder | Manufacturer, Sh | nipper, etc.) | Complete if requesting W | orksite Preference: |
| STREET ADDRESS | CITY | STATE | ZIP CODE | LABOR HOURS ESTIMATED | ENTERPRISE ZONE NAME | CRITERIA (A - C) |
| NAME OF FIRM | FIRM'S ROLI | E IN THIS BID (Examples: Bidder | Manufacturer, Sh | nipper, etc.) | Complete if requesting W | orksite Preference: |
| STREET ADDRESS | CITY | STATE | ZIP CODE | LABOR HOURS ESTIMATED | ENTERPRISE ZONE NAME | CRITERIA (A - C) |
| NAME OF FIRM | FIRM'S ROLI | E IN THIS BID (Examples: Bidder | Manufacturer, Sh | nipper, etc.) | Complete if requesting W | orksite Preference: |
| STREET ADDRESS | CITY | STATE | ZIP CODE | LABOR HOURS ESTIMATED | ENTERPRISE ZONE NAME | CRITERIA (A - C) |
| NAME OF FIRM | FIRM'S ROLI | E IN THIS BID (Examples: Bidder | Manufacturer, Sh | nipper, etc.) | Complete if requesting W | orksite Preference: |
| STREET ADDRESS | CITY | STATE | ZIP CODE | LABOR HOURS ESTIMATED | ENTERPRISE ZONE NAME | CRITERIA (A - C) |
| NAME OF FIRM | FIRM'S ROLI | E IN THIS BID (Examples: Bidder | Manufacturer, Sh | nipper, etc.) | Complete if requesting W | orksite Preference |
| STREET ADDRESS | CITY | STATE | ZIP CODE | LABOR HOURS ESTIMATED | ENTERPRISE ZONE NAME | CRITERIA (A - C) |
| | | | TOTAL LABOR | २ | | |
| SECTION 3: REQUEST FOR 19 | % - 4% WORKFORCE PREFERENCE | HOL | IRS ESTIMATE | D | | |
| ☐ I request a 1% preference for hi | iring eligible persons to perform 5 - 9.99% of th | e total contract labor h | ours | | | |
| ☐ I request a 2% preference for hi | iring eligible persons to perform 10 - 14.99% of | the total contract labo | r hours | | | |
| ☐ I request a 3% preference for hi | iring eligible persons to perform 15 - 19.99% of | the total contract labo | r hours | | | |
| ☐ I request a 4% preference for hi | iring eligible persons to perform 20% or more o | f the total contract labo | or hours | | | |
| SECTION 4: CERTIFICATION | | | | | | |
| | , that (1) the bidder is a California based company as or hours required to perform a contract for services sh | | | | | |
| | s living in a targeted employment area or who are en | | | | | |
| • | s request is true, correct, and complete. Any person f | | , , | | | • |
| subject to penalties, fines and possible | loss of State contacting eligibility. | | | | | |
| BIDDER'S SIGNATURE | | PRINTED OI | R TYPED NAME | | | |
| TITLE | AREA CODE & PHONE NUM | /BER | | DATE EXECUTED | | |

ENTERPRISE ZONE ACT (EZA) PREFERENCE REQUEST

STD 831 (NEW. 5-99)

Program Description

The intent of the Enterprise Zone Act (EZA) is to promote economic development and employment opportunities in designated enterprise zones by offering bidding preferences on qualified solicitations.

EZA provides for two preferences: Worksite and Workforce.

Worksite Preference: Bidders may be eligible for a 5% bid preference on state goods and services contracts valued at more than \$100,000 if the worksite is located in an enterprise zone as designated by the State Trade and Commerce Agency.

EZA allows state contracting officials to award the bid worksite preference when 50% of the labor hours required to manufacture the goods and to perform a contract for goods, or 90% of the labor hours required to perform a contract for services is performed at the approved worksites.

Workforce Preference: Companies qualifying for the 5% worksite preference may request an additional 1% - 4% workforce preference by certifying to hire a specified percent of their contract workforce employees from a targeted employment area, or from enterprise zone eligible employees.

To request workforce preference, the bidder must first identify an eligible worksite.

EZA bid preferences do not apply to contracts in which the worksite is fixed.

For more detail, see California Government Code, Title 1, Division 5, Chapter 12.8, Section 707 et seq. and California Code of Regulations, Title 2, Section 1896.100.

Other Bidding Preference Programs

In addition to EZA, the State has other bidding preference programs for which you might qualify:

TACPA - Target Area Contract Preference Act (up to a 9% bidding preference)

LAMBRA - Local Agency Military Base Recovery Area Act (up to a 9% bidding preference)

Small Business - Certified small businesses in California can receive a 5% bidding preference.

A non-certified small business that claims any combination of EZA, TACPA or LAMBRA preferences cannot use these preferences to displace a certified small business.

How the Bidding Preference Works

The EZA bidding preference that you qualify for is used only for bid solicitation purposes, to a maximum of \$50,000. The preference does not alter the amount of the resulting contract.

If you qualify for more than one bidding preference (EZA, TACPA, LAMBRA, Small Business) the maximum preference allowed by law is 15% or \$100,000.

Reporting Requirements

Firms receiving EZA preferences must report their labor hours. Reference the state contract on which you are bidding for specific reporting requirements.

How to Identify Enterprise Zone Locations

Contact the city or county economic development office or the State Trade and Commerce Agency at (916) 324-8211.

Instructions for completing "Enterprise Zone Act Preference Request" on Reverse

Section 1: Enter the solicitation number and the name of the state department or agency offering the solicitation.

Section 2: Enter the requested information for 1) the bidding firm, and 2) all firms with whom the bidder will be subcontracting to perform the work required to complete this bid. You must list all firms, including the manufacturer, if applicable, not just those requesting worksite preference.

Firm's role in this bid: Enter the appropriate description indicating what job the listed firm will perform.

Enterprise Zone Name: See instructions above on "How to Identify Enterprise Zone Locations."

Labor Hours Estimated: For each firm listed, estimate the total labor hours to be performed. Total the estimated hours for each firm and enter them into the box labeled "Total Labor Hours Estimated."

Criteria:

A: The firm is located in a California designated enterprise zone

B: The firm will establish a worksite in a California designated enterprise zone.

C: GOODS ONLY. The firm will purchase the contract goods from the manufacturer(s) located in a California designated enterprise zone.

Section 3: Select the appropriate box, indicating the percentage of workforce preference you are requesting. To request workforce preference, the bidder must first identify an eligible worksite.

Section 4: The Bidder must complete and sign the Certification.

LOCAL AGENCY MILITARY BASE RECOVERY AREA (LAMBRA) PREFERENCE REQUEST

STD 832 (NEW. 5-99)

| SECTION | 1. SOL | LICITATION | INFORMA | ΔΤΙΩΝ |
|---------|--------|------------|---------|-------|
| | | | | |

| - | |
|---|--------------|
| | BID NUMBER |
| | |
| | AGENCY/DEPT. |
| | |

This request form should be completed by bidders wishing to apply for LAMBRA preferences for this solicitation.

See reverse for program description and instructions for completing this form.

SECTION 2: REQUEST FOR 5% WORKSITE PREFERENCE List the bidding firm and all suppliers and subcontractors who will work with the bidder to fulfill the terms

| of the contract. Indicate those firms | for which the Bidder is requesting worksite pre | | | ion. Attach additional pages if needed. |
|---|--|--|--|--|
| NAME OF FIRM | FIRM'S ROLE | IN THIS BID (Examples: Bidder, Man | ufacturer, Shipper, etc.) | Complete if requesting Worksite Preference: |
| STREET ADDRESS | CITY | STATE ZIP CC | DE LABOR HOURS ESTIN | MATED MILITARY BASE RECOVERY AREA NAME Criteria (A - C) |
| NAME OF FIRM | FIRM'S ROLE | IN THIS BID (Examples: Bidder, Man | ufacturer, Shipper, etc.) | Complete if requesting Worksite Preference: |
| STREET ADDRESS | CITY | STATE ZIP CC | DE LABOR HOURS ESTIN | MATED MILITARY BASE RECOVERY AREA NAME Criteria (A - C) |
| NAME OF FIRM | FIRM'S ROLE | IN THIS BID (Examples: Bidder, Man | ufacturer, Shipper, etc.) | Complete if requesting Worksite Preference: |
| STREET ADDRESS | CITY | STATE ZIP CC | DE LABOR HOURS ESTIN | MATED MILITARY BASE RECOVERY AREA NAME Criteria (A - C) |
| NAME OF FIRM | FIRM'S ROLE | IN THIS BID (Examples: Bidder, Man | ufacturer, Shipper, etc.) | Complete if requesting Worksite Preference: |
| STREET ADDRESS | CITY | STATE ZIP CC | DE LABOR HOURS ESTIM | |
| NAME OF FIRM | FIRM'S ROLE | IN THIS BID (Examples: Bidder, Man | ufacturer, Shipper, etc.) | Complete if requesting Worksite Preference: |
| STREET ADDRESS | CITY | STATE ZIP CC | DE LABOR HOURS ESTIN | |
| NAME OF FIRM | FIRM'S ROLE | IN THIS BID <i>(Examples: Bidder, Man</i> | ufacturer, Shipper, etc.) | Complete if requesting Worksite Preference: |
| STREET ADDRESS | CITY | STATE ZIP CC | DE LABOR HOURS ESTIN | |
| NAME OF FIRM | FIRM'S ROLE | IN THIS BID <i>(Examples: Bidder, Man</i> | ufacturer, Shipper, etc.) | Complete if requesting Worksite Preference: |
| STREET ADDRESS | CITY | STATE ZIP CC | DE LABOR HOURS ESTIM | |
| NAME OF FIRM | FIRM'S ROLE | IN THIS BID (Examples: Bidder, Man | ufacturer, Shipper, etc.) | Complete if requesting Worksite Preference: |
| STREET ADDRESS | CITY | STATE ZIP CC | DE LABOR HOURS ESTIN | |
| SECTION 3: REQUEST FOR 1% | | TOTA HOURS ES | LABOR TIMATED | |
| I request a 1% preference for him | ring eligible persons to perform 5 - 9.99% of the ring eligible persons to perform 10 - 14.99% of | | | |
| | ring eligible persons to perform 15 - 19.99% of | | | |
| I request a 4% preference for hir | ring eligible persons to perform 20% or more of | the total contract labor hou | rs . | |
| SECTION 4: CERTIFICATION | | | | |
| 100% of the labor hours required to perfethe bidder shall hire persons living within request is true, correct, and complete. A of State contacting eligibility. | orm a contract for services shall be performed at the a Local Agency Military Base Recovery Area to perf | designated Local Agency Milita orm the specified percent of total formation, omitting information, | ry Base Recovery Area(s) cl al contract labor hours as red or failing to comply with the | labor hours required to perform a contract for goods, or aimed in Section 2, (3) if applying for workforce preference, quested in Section 3, and (4) all information provided in this EZA statute is subject to penalties, fines and possible loss |
| BIDDER'S SIGNATURE | | PRINTED OR TYPED | NAME | |
| TITLE | AREA CODE & PHONE NUM | BER | DATE EXECUT | ED |

LOCAL AGENCY MILITARY BASE RECOVERY AREA (LAMBRA) PREFERENCE REQUEST

STD 832 (NEW. 5-99)

Program Description

The intent of the Local Agency Military Base Recovery Area (LAMBRA) Act is to promote economic development and employment opportunities in designated LAMBRAS by offering bidding preferences on qualified solicitations.

The LAMBRA Act provides for two preferences: Worksite and Workforce.

Worksite Preference: Bidders may be eligible for a 5% bid preference on state goods and services valued at more than \$100,000 if the worksite is located in a LAMBRA as designated by the State Trade and Commerce Agency.

LAMBRA allows state contracting officials to award the bid worksite preference when 50% of the labor hours required to perform a contract for goods, or 100% of the labor hours required to perform a contract for services is performed at the approved worksites.

Workforce Preference: Companies qualifying for the 5% worksite preference may request an additional 1% - 4% workforce preference by certifying to hire a specified percent of their contract workforce employees from those designated as LAMBRA qualified individuals. (See Assembly Bill 3: Chapter 1012, 9/30/98).

To request workforce preference, the bidder must first identify an eligible worksite.

LAMBRA bid preferences do not apply to contracts in which the worksite is fixed.

For more detail, see California Government Code, Section 7118 et seq., and California Code of Regulations, Title 2, Section 1896.100. et seq.

Other Bidding Preference Programs

In addition to the LAMBRA Act, the State has other bidding preference programs for which you might qualify:

TACPA - Target Area Contract Preference Act (up to a 9% bidding preference)

EZA -Enterprise Zone Act (up to 9% bidding preference)

Small Business - Certified small businesses in California can receive a 5% bidding preference.

A non-certified small business that claims any combination of EZA, TACPA or LAMBRA preferences cannot use these preferences to displace a certified small business.

How the Bidding Preference Works

The LAMBRA bidding preference that you qualify for is used only for bid solicitation purposes, to a maximum of \$50,000. The preference does not alter the amount of the resulting contract.

If you qualify for more than one bidding preference (EZA, TACPA, LAMBRA, Small Business) the maximum preference allowed by law is 15% or \$100,000.

Reporting Requirements

Firms receiving LAMBRA preferences must report their labor hours. Reference the state contract on which you are bidding for specific reporting requirements.

How to Identify LAMBRA Locations

Contact the State Trade and Commerce Agency at (916) 324-8211.

Instructions for completing "LAMBRA" Preference Request on Reverse

Section 1: Enter the solicitation number and the name of the state department or agency offering the solicitation.

Section 2: Enter the requested information for 1) the bidding firm, and 2) all firms with whom the bidder will be subcontracting to perform the work required to complete this bid. You must list all firms, including the manufacturer, if applicable, not just those requesting worksite preference.

Firm's role in this bid: Enter the appropriate description indicating what job the listed firm will perform.

Military Base Recovery Area Name: See instructions above on "How to Identify LAMBRA Locations."

Labor Hours Estimated: For each firm listed, estimate the total labor hours to be performed. Total the estimated hours for each firm and enter them into the box labeled "Total Labor Hours Estimated."

Criteria:

A: The firm is located in a California designated LAMBRA.

B: The firm will establish a worksite in a California designated LAMBRA.

C: GOODS ONLY. The firm will purchase the contract goods from the manufacturer(s) located in a LAMBRA.

Section 3: Select the appropriate box, indicating the percentage of workforce preference you are requesting. To request workforce preference, the bidder must first identify an eligible worksite.

Section 4: The Bidder must complete and sign the Certification.

Attachment 6 RFP 500-00-509 CUSTOMER REFERENCES

STATE OF CALIFORNIA

CALIFORNIA ENERGY COMMISSION CONTRACTS OFFICE

CUSTOMER REFERENCES

ATTACHMENT 8

Provide a minimum of 4 references, use additional pages as needed.

Reference #1

| Name of Organization | |
|--|--|
| Address | |
| Contact Name | |
| Contact Title | |
| Contact Phone Number | |
| Describe the services and products your firm provided to the organization. | |

ATTACHMENT 7 PIER PROJECT TERMS & CONDITIONS

1. CONTRACT CONTENTS

This contract consists of the clauses listed below and attached exhibits which are hereby expressly incorporated herein.

- 1. Contract Contents
- 2. Contract Purpose
- 3. Contract Term
- 4. Definitions
- 5. Payments to Contractor
- **6.** Travel and Per Diem

Financial Information

- 7. Purchase of Equipment
- 8. Project Budget Revision
- 9. Contract Management
- 10. Standard of Performance
- 11. Subcontractors and Subcontractor Agreements
- 12. Reporting
- 13. Recordkeeping, Cost Accounting and Auditing
- **14.** Business Activity Reporting
- **15.** Review and Notice of Conflicting Terms
- **16.** Confidentiality
- 17. Intellectual Property Items Developed Prior to this Contract
- 18. Rights of Parties Regarding Intellectual Property
- **19.** Royalty Payments to Commission
- 20. Notices to Parties
- 21. Disputes
- 22. Stop Work
- 23. Termination
- **24.** General Terms and Conditions

Exhibit A Work Statement

Attachment A-1 - Progress Report Format Attachment A-2 - Final Report Format

Exhibit B: Task Deliverables, Schedule

Exhibit C: Budget

Exhibit D: Contract Contacts —Commission and Contractor

Exhibit E: Confidential and Intellectual Property List

2. CONTRACT PURPOSE

The purpose of this contract is to fund research, development and demonstration projects under the Energy Commission Public Interest Energy Research (PIER) Program. The contract will description. Specific tasks are detailed in the attached Exhibit A, "Work Statement."

3. CONTRACT TERM

The term of this contract shall be from <u>(term)</u>. This contract is of no force or effect until signed by both parties, and approved by the Department of General Services.

4. DEFINITIONS

- A. Affiliate of the Contractor means any natural person, corporation, partnership, joint venture, sole proprietorship or other business entity directly or indirectly through one or more intermediaries, controlling, controlled by, or under common control with the Contractor. The term control (including the terms controlled by and under common control with) means the possession, direct or indirect, of the power to direct or cause the direction of the management and policies of a person, whether through the ownership of voting securities, by contract, or otherwise. For purposes of this contract, it is presumed that ownership or control of the voting power of more than fifty percent (50%) of the voting stock or partnership interests in an entity constitutes control of that entity.
- B. **Contract Budget** refers to Commission reimbursable and Contractor's matching fund expenditures for that portion of the project covered by the contract.
- C. **Contract Period** is the length of this contract between the Energy Commission and the Contractor. The Contractor's "project" may coincide with or extend outside the "contract period."

- D. **Date** means calendar date.
 - 1) **Contract Start Date** is the date Commission reimbursable expenses can begin after the Department of General Services signs the contract document.
 - 2) **Contract End Date** is the last date Commission reimbursable expenses can be incurred and is the expiration date of the contract.
- E. **Economic Benefit** for a project co-funded using Energy Commission funds means the realization of economic gain or other tangible benefits by the Contractor or its affiliates (except bona fide third party purchasers of Contractor's commercial products) through the use of project-related products and rights, including but not limited to, operation, sale, distribution or manufacturing, or by any other transaction, including but not limited to, grant, rent, loan, equity, option, transfer, license or other fee, or by otherwise disposing of the project-related products and rights.

The Commission may rely upon professional accounting opinion in making a final determination of the dollar value of gross revenue, and such determination shall be the basis for calculating the royalty payment due the Commission.

F. **Equipment** is defined as having a useful life of at least one year, having an acquisition unit cost of at least \$5,000, and purchased with Commission funds. **Equipment** means any products, objects, machinery, apparatus, implements or tools purchased, used or constructed within the project, including those products, objects, machinery, apparatus, implements or tools from which over thirty percent (30%) of the equipment is composed of materials purchased for the project.

For purposes of determining depreciated value of equipment used in the contract, the project shall terminate at the end of the normal useful life of the equipment purchased, funded and/or developed with Commission funds. The Commission may determine the normal useful life of such equipment.

- G *Financial Statements* means balance sheets, statements of operations, statements of cash flows, and capital statements.
- H. Gross Revenues means the gross sales price, rentals and other amounts received by Contractor from or on account of the sale, lease, or other transfer or use of Project-Related Products and Rights, less sales tax paid. Gross Revenues shall be determined as above and in accordance with appropriate Federal cost principles and any economic benefit.
- I. **Key Personnel** are employees or consultants of the Contractor who are critical to the outcome of the project. For example, they may have expertise in the particular field, or have experience that is not available from another source. Replacing these individuals may affect the outcome of the project.
- J. **Key Subcontractors** are contractors, subcontractors or vendors to the Contractor and who are critical to the outcome of the project. As with Key Personnel, Key Subcontractors may have expertise in the particular field, or have experience that is not available from another source and replacement may significantly affect the project. An employee of the Contractor's subcontractor or vendor may also qualify as key.
- K. Match Fund Participant means any party which supplies match funds to the project.
- J. *Materials* means the substances used in constructing a finished object, commodity, device, article or product.
- K. Otherwise Disposing Of means (1) project-related products and rights not sold but delivered by the Contractor or its affiliates to others regardless of the basis for compensation, if any, and

- (2) project-related products and rights put into use by the Contractor or any third party for any purpose other than testing or evaluation of the project-related products and rights.
- L. **Program** refers to the entire effort undertaken and planned by the Contractor including the work co-funded by the Commission. The project may coincide with or extend beyond the contract period.
- M. **Project** refers to the work elements of the program. Typically, there are distinct projects within the program being paid for by the Commission under this contract.
- N. **Project-Related Products and Rights** means any and all energy inventions, discoveries, machines, designs, computer software, products, devices, mechanisms, methods, protocols, processes, algorithms, flowcharts, diagrams, trade secrets, data, copyrights, patents, trademarks, proprietary rights, and the like created or made or discovered or first reduced to practice by the Contractor or other third party as a result, in whole or in part, of the contract award(s) and any and all updates, revisions, modification, enhancements, derivations, variations, additions, continuations, renewals, and extensions thereto and all proceeds and products therefrom.
- O. Sale is sale, license, lease, gift or other transfer of a project-related product or right.
- P. **Sales Price** means gross revenue, excluding normal returns and allowances such as sales tax, freight and insurance, if applicable, derived from a sale.
- Q. **Subject Invention** means any and all energy invention or discovery conceived, or first actually reduced to practice in the course of or under the Commission-funded portion of this contract (i.e., that portion of this contract for which Contractor has invoiced the Commission and received reimbursement) and includes any art, method, process, machine, manufacture design or composition of matter, or any new and useful improvement hereof, whether patented or unpatented, under the patent laws of the United States of America or any foreign country.
- R. **Technology** refers to the general subject area where the product or innovation will be used. For example, solar thermal electric generation is a technology area; direct steam generation is an innovation in this technology area. **Technology Developed** means subject invention and/or project-related products and rights.

S. Terms Relating to Data

- Technical Data or Data as used throughout this contract means recorded information regardless of form or characteristic, of a scientific or technical nature. It may, for example, document research; document experimental, developmental, demonstration, or engineering work; or be usable or used to define a design or process; or to procure, produce, support, maintain, or operate material. The data may be graphic or pictorial delineations in media such as drawings or photographs, test specifications or related performance or design type documents or computer software (including computer programs, computer software data bases, and computer software documentation). Examples of technical data include manufacturing techniques and methods, machinery, devices such as tools, products, or components, research and engineering data, engineering drawings and associated lists, specifications, engineering calculations, standards, process sheets, manuals, technical reports, catalog item identification, and related information. Technical data as used herein does not include financial reports, cost analyses and other information incidental to contract administration.
- 2) **Business Information** is information about the operation of a specific business. It includes information concerning the cost and pricing of goods, supply sources, cost analyses, characteristics of customers, books and records of the business, sales information including mailing lists, customer lists, business opportunities, information

regarding the effectiveness and performance of personnel, and information incidental to contract administration.

- Public Information is information previously published, generally available from more than one source, or information in the public domain. All air monitoring and emission data included in a proposal or requested through a contract are public information. California Government Code Section 6254.7 states that all information, analyses, plans or specifications that disclose the nature, extent, quantity, or degree of air contaminants or other pollution which any article, machine, equipment, or other contrivance will produce, which any state or local agency requires Contractor to provide before the Contractor builds, erects, alters, replaces, operates, sells, rents, or uses such article, etc., are public records.
- 4) **Confidential Information** is technical data or business information Contractor has satisfactorily identified and which the Commission has agreed to designate as confidential.
- Proprietary Data is such data as Contractor has identified in a satisfactory manner as being under Contractor's control prior to commencement of performance of this contract or produced by Contractor or its subcontractors at its own expense, and which Contractor has reasonably demonstrated as being of a proprietary nature either by reason of copyright, patent or trade secret doctrines in full force and effect at the time when performance of this contract is commenced.
- A *Trade Secret* is any formula, plan, pattern, process, tool, mechanism, compound, procedure, production data, or compilation of information which is not patented and which is generally known only to certain individuals with a commercial concern and are using it to fabricate, produce or compound an article of trade or a service having commercial value and which gives its user an opportunity to obtain a business advantage over competitors who do not know or use it.
- Generated Data is that data which the Contractor collects, collates, records, deduces, reads out or postulates for use in the performance of this contract. In addition, any electronic data processing program, model or software system developed or substantially modified by the Contractor in the performance of this contract at Commission expense, together with complete documentation thereof, shall be treated as generated data.
- 8) **Deliverable Data** is that data which, under the terms of this contract, is required to be delivered to the Commission.

5. PAYMENTS TO CONTRACT OR

Subject to the conditions listed below, the Commission agrees to reimburse Contractor, monthly in arrears, for expenses incurred in accordance with Exhibit C, Budget. The consideration to be paid Contractor, as provided herein, shall be in compensation for Contractor's actual and allowable expenses incurred in the performance hereof, including travel, per diem, and applicable taxes, unless otherwise expressly so provided. The total amount of this contract shall not exceed \$'ttlkcost".00('spellout").

- A. A request for payment shall consist of, but is not limited to:
 - 1) An invoice that is a **list** of actual expenses incurred during the billing period, backup information is not required, see Audit clauses. The invoice list must include:
 - a) date prepared, contract number, contractor's Federal ID number and billing period,
 - b) contractor s actual hourly labor rates by individual, which may be fully loaded,
 - c) operating expenses, including equipment, travel, miscellaneous,

- d) subcontractor invoices, identifying small business and disabled veteran business,
- e) overheads, direct & indirect, not included in the fully loaded hourly rate,
- f) match fund expenditures, and
- g) by task: cumulative amounts, budgeted, billed to date, current billing, and balance of funds.
- 2) A progress report that documents evidence of progress, which includes written progress reports and deliverables prepared by the Contractor as detailed in Exhibit A and Exhibit B
- B. The Commission will accept computer-generated or electronically transmitted invoices without backup documentation provided that Contractor sends a hardcopy the same day to the address in Exhibit D, Contract Contacts.
- C. Contractor shall submit all invoices to the address designated in Exhibit D.
- D. Each invoice is subject to Commission Contract Manager approval and payment by the State Controller's Office.
- E. The Commission Contract Manager may approve invoices requesting partial payment of a task if the Contractor has demonstrated sufficient evidence of progress toward preparing the deliverables required in that task. The Commission Contract Manager will dispute an invoice requesting payment of all funds remaining in that task budget, if the Commission Contract Manager has not received and approved all of the deliverables due for that task.
- F. Payments shall be made to Contractor only for undisputed invoices. An undisputed invoice is an invoice executed by Contractor for services rendered to the Commission and for which additional evidence is not required to make payment. The Commission Contract Manager shall give written notice and specify the known reasons for dispute to Contractor within 15 working days of receipt of the disputed invoice by using a State of California Standard Form 209. If the invoice is not disputed within the 15 working days, the invoice is presumed to be valid, but is subject to audit and verification.
- G. Commission shall retain from each invoice an amount equal to 10 per cent (10%) of that invoice, excluding equipment invoices. The retained amount shall be held by the Commission and released to Contractor only upon the Commission's approval that the contract work has been satisfactorily completed and the Final Report has been received and approved. Contractor must submit an invoice for the retained amount.

OR (Commission s option)

- G. Retention may be released upon completion of tasks that are considered separate and distinct, i.e., the task is a stand alone piece of work and could be done without the other tasks. Tasks for administration or management of the contract and/or subcontractors are not considered separate and distinct tasks. Therefore, retention on those tasks will not be released until the termination of the contract. For all other tasks, the Commission Contract Manager shall specify and notify the Contractor Project Director in writing which tasks can be paid in full upon their completion. The procedure for releasing retention upon task completion is as follows:
 - 1) Contractor must submit all deliverables required by the task and an invoice requesting payment in full for the task.
 - 2) The Commission Contract Manager must approve the submitted work. The work must be satisfactorily completed and deliverables accepted by the Commission Contract Manager.
 - 3) The Commission Contract Manager must prepare and submit to the Contracts Office, with the Contractor s invoice requesting retention payment, a copy of all approved deliverables and a Contract/Contractor Evaluation Form.

- H. Payment shall be made to Contractor no later than 30 calendar days from the date a correct, undisputed invoice is received in the Commission Accounting Office. The State shall make payment to the Contractor for performance under this contract, in accordance with applicable deliverable criteria, receipt and approval by the Commission, and in accordance with invoices submitted.
- I. Contractor is entitled to interest penalties beginning on the 46th calendar day that an undisputed invoice is not paid. Contractor is not required to submit an invoice for the interest penalties.
- J. Contractor shall retain all records relating to direct and indirect expenses reimbursed to Contractor hereunder, and to hours of employment on this contract by all employees of Contractor for which the Commission is billed. Such records shall be maintained for a period of three years after final payment of this contract per statute and shall be available for inspection or audit at any reasonable time by the Commission or its designee.
- K. This contract is funded through the Public Interest Energy Research (PIER) Program. Contractor may be providing matching funds identified in Contractor's proposal and as detailed in Exhibit C, Budget. Match sources may be revised subject to the requirements of Exhibit A.

6. TRAVEL AND PER DIEM

- A. Travel identified in Exhibit C, Budget is approved and does not require further authorization.
- B. Travel that is not included in Exhibit C, Budget shall require prior written authorization from the Commission Contract Manager. Commission will reimburse travel expenses from the Contractor's office location where the employees assigned to the contract are permanently located.
- C. Commission shall reimburse Contractor for travel and per diem, up to but not to exceed, the rates allowed nonrepresented State employees. Commission shall provide Contractor with current rates and updates when revised by the State or requested by Contractor. Travel expenses in excess of the State rates cannot be reimbursed.
- D. Contractor must retain documentation of travel expenses in its financial records as follows:
 - expenses must be detailed using the current State rates,
 - expenses must be listed by trip including dates and times of departure and return, and
 - receipts for travel expenses claimed must be retained by Contractor (receipts are not required for travel meals or incidentals within current allowable rates).

7. PURCHASE OF EQUIPMENT

- A. Equipment, as defined in Clause 4 and identified in Exhibit C, Budget, PIER Reimbursable Expenditures, is approved for purchase.
- B. Equipment not included in Exhibit C, Budget, PIER Reimbursable Expenditures, shall be subject to prior written approval from the Commission Contract Manager.
- C. All equipment purchased with Commission funds shall be made subject to the following terms and conditions:

- The Commission Contract Officer will complete and sign a Uniform Commercial Code (UCC.1) Financing Statement and submit it to the Contractor for signature. The Commission Contract Officer will file the signed UCC.1 with the Secretary of State's Office. Invoices for equipment purchases associated with a UCC.1 will not be processed until the UCC.1 has been filed with the Secretary of State's Office.
- 2) Title to all non-expendable equipment purchased in part or in whole with Commission funds shall remain with the Commission.
- 3) Contractor shall assume all risk for maintenance, repair, destruction and damage to equipment while in the possession or subject to the control of Contractor. Contractor is not expected to repair or replace equipment that is intended to undergo significant modification or testing to the point of damage/destruction as part of the work described in Exhibit A, Work Statement.

D. Upon termination of this contract, Commission may:

- 1) if requested by the Contractor, authorize the continued use of such equipment to further Public Interest Energy Research efforts,
- 2) by mutual agreement with the Contractor, allow the Contractor to purchase such equipment for an amount not to exceed the residual value of the equipment as of the date of termination of this contract, or
- 3) request that such equipment be delivered to the Commission with any costs incurred for such return to be borne by the Commission.

8. PROJECT BUDGET REVISIONS

- A. Budget reallocations that do not significantly affect the scope of work will be made in the following manner. Contractor shall provide reasonable advance notification to the Commission Contract Manager of any anticipated budget reallocations. Contractor may reallocate a task budget up to 15 percent (15%) of the original task amount, with prior written notification to the Contract Manager. Reallocations of more than 15 percent (15%) of an original task budget require prior written approval of the Commission Contract Manager and the Program Team Lead. Commission Contract Manager will notify the Contractor Project Director in writing within 10 working days. The Commission Contract Manager shall send approved changes in a revised Exhibit C, Budget to the Commission Contract Officer.
- B. Significant changes in the scope of work must be approved by the Commission in the form of a formal amendment. A change is significant if it increases the project budget beyond the approved amount, results in changes in deliverables, moves due dates beyond the term of the contract or modifies the scope of work reasonably beyond that approved at the Commission business meeting.

9. CONTRACT MANAGEMENT

A. Contractor Project Director

The Contractor Project Director on behalf of Contractor is designated in Exhibit D. The Contractor Project Director may not be replaced without Commission Contract Manager's prior written approval. Such approval shall not be unreasonably withheld. The Contractor Project Director is responsible for the day to day project status, decisions and communications with the Commission Contract Manager.

B. Commission Contract Manager

The Commission Contract Manager is designated in Exhibit D. Commission may change the Contract Manager by notice given Contractor at any time signed by the Commission Contract Officer. The Commission Contract Manager is responsible for the day-to-day contract status, decisions and communications with the Contractor Project Director. The Commission Contract Manager will review and approve all project deliverables, reports and invoices.

C. Within the contract term stated in contract clause 2, revisions to Exhibit B, Task Deliverables and Schedule, may be made by the Contractor Project Director and approved by the Commission Contract Manager.

10. STANDARD OF PERFORMANCE

- A. Contractor, its subcontractors and their employees in the performance of Contractor's work under this contract shall be responsible for exercising the degree of skill and care required by customarily accepted good professional practices and procedures used in scientific and engineering research fields.
- B. The failure of a project to achieve the technical or economic goals stated in the Work Statement is not a basis for the Commission to determine that the work is unacceptable, unless the work conducted by the Contractor or subcontractors is deemed by the Commission to have failed the foregoing standard of performance.
- C. In the event that Contractor or its subcontractor fail to perform in accordance with the foregoing standard of performance, the Commission Contract Manager and the Contractor Project Director shall seek to negotiate in good faith an equitable resolution satisfactory to both parties. If such a resolution cannot be reached, the parties shall work through the Commission s dispute resolution process described in the Disputes clause herein.
- D. Nothing contained in this section is intended to limit any of the rights or remedies which the Commission may have under law.
- E. The Commission Contract Manager shall, upon completion of the contract and/or release of retention, prepare a performance evaluation of Contractor.
 - 1) If the Commission Contract Manager prepares an unsatisfactory evaluation, the evaluation shall be filed with the Department of General Services, Office of Legal Services (DGS), and sent to the Contractor within 15 days. The Contractor shall have 30 days to prepare a response to the evaluation of the contract performance. The Contractor shall send its response to the DGS and a copy to the Commission.
 - 2) The unsatisfactory evaluation and Contractor's response shall not be a public record and shall remain on file for a period of 36 months only.

11. PERSONNEL, SUBCONTRACTORS, DVBEs

A. Key Personnel

Contractor s key personnel, listed in Exhibit D, may not be substituted without the Commission Contract Manager's prior written approval. Such approval shall not be unreasonably withheld. Contractor may substitute all other personnel, with reasonable advance notification made to the Commission Contract Manager.

B. Key Subcontractors

Contractor s key subcontractors, listed in Exhibit D, may not be substituted without the Commission Contract Manager s prior written approval. Such approval shall not be unreasonably withheld. Contractor may substitute all other subcontractors, with reasonable

advance notification made to the Commission Contract Manager. Replacement of key subcontractors is subject to the conditions of subclause C.

C. Agreements with Subcontractors

- 1) Contractor shall be responsible for establishing and maintaining contractual agreements with and reimbursement of each of the subcontractors for work performed in accordance with the terms of this contract. Contractor shall provide Commission with copies of all contractual agreements with key subcontractors promptly upon final execution thereof.
- 2) Flowdown provisions that should be included in subcontracts are listed below. Review each provision for applicability to each situation.

Definitions Confidentiality

Travel & Per Diem Intellectual Property Items Developed prior to this Contract

Purchase of Equipment Recordkeeping, Cost Accounting & Auditing Standard of Performance Rights of Parties Regarding Intellectual Property

Disputes Stop Work

Termination General Terms & Conditions, including nondiscrimination

- 3) PIER contractors who are subcontracting with a private or public university may use language from the Commission s terms and conditions for universities and referenced in Request for Proposal 500-98-505, Attachment 7, amended on May 8, 1998, which addresses special terms applicable to universities.
- 4) Replacement or substitution of all non-key subcontractors is permitted with reasonable advance written notification to the Commission Contract Manager and shall be subject to the provisions of subclauses D and E below.
- 5) Each subcontract shall contain provisions similar to those of Clause 18. Rights of Parties Regarding Intellectual Property, subclause F. Limitations on Contractor Disclosure of Contract Data, Information, Reports and Records, related to the confidentiality of Commission data and its nondisclosure by Contractor.
- All subcontracts entered into pursuant to this contract shall be subject to examination and audit by the Bureau of State Audits for a period of three years after final payment under the contract.
- 7) Each subcontract to which the Commission has consented shall contain a provision that further assignments shall not be made to any third or subsequent tier subcontractor without additional advance written consent of Commission.
- D. Additions. Removal. or Substitutions of Subcontractors

Any subcontractor change shall be subject to the following conditions:

- 1) Contractor shall provide the Commission with a copy of its contracting policies and procedures for selecting subcontractors. The Commission Contract Officer shall evaluate the Contractor s process to determine if it is in substantial accord with the State s process. The Commission Contract Officer will provide a written determination to the Contractor. The Commission Contract Officer will retain this set of contracting policies and procedures until the final audit of project records.
- 2) If Contractor's process is acceptable, Contractor may use its process to solicit and select subcontractors. If, however, Contractor's process does not substantially meet the State's requirements, Contractor shall solicit a minimum of three bids or provide justification, in advance, to the Contract Officer, as to why a competitive process is not appropriate.

Thirty days prior to using new policies and procedures, the Contractor shall notify the Commission Contract Officer and provide a detailed, written description of the changes. The Commission Contract Officer will provide a written determination to the Contractor stating whether the revised changes are still in substantial accord with the State's process.

E. Disabled Veteran Business (DVBE) Changes

Contractor must use the DVBE subcontractors/vendors identified in its proposal for the duration of the contract. Replacement of DVBEs must be approved in advance by the Commission. Contractor must notify the Commission Contract Manager in writing. The process of replacing any subcontractor/vendor is defined in subclause D above. In addition, the Contractor's written request must include:

- 1) A letter from the Contractor explaining the reason for the change and the identity of the DVBE subcontractor/vendor changed; or
- 2) If the change is not a DVBE, an explanation of the Contractor's efforts (good faith) to replace the DVBE with another DVBE.

Contractor shall submit the request to the Commission Contract Manager, the Commission Contract Officer determines compliance with the DVBE. The Contractor's request and the Commission's approval or disapproval shall not be an excuse for noncompliance with any other provision of law including, but not limited to, the subletting and subcontracting fair practices act or any other contract requirements related to substitution of subcontractors.

Contractor's failure to adhere to the DVBE participation goals in its proposal may be cause for contract termination and recovery of damages under the rights and remedies due the Commission under the Termination clause.

12. REPORTING

A. All reports and deliverables shall be delivered to the Accounting Office and address designated in Exhibit D. Confidential reports and deliverables shall be delivered to the Contracts Officer designated in Exhibit D.

B. Progress Reports

The Contractor shall prepare progress reports which summarize all contract activities conducted by the Contractor for the reporting period, including an assessment of the ability to complete the project within the current budget and any anticipated cost overruns. Each progress report is due to the Commission Contract Manager within 30 days after the end of the reporting period. The Commission Contract Manager will specify the report format, contents, and number of copies to be submitted, see Attachment A-1, Progress Report Format.

C. Final Report and Final Meeting

At the conclusion of the contract s technical work and as provided for in Exhibit A, Work Statement, and Exhibit B, Task Deliverables Schedule, Contractor shall prepare a comprehensive written Final Report, including an Executive Summary. The Commission Contract Manager will review and approve the Final Report.

Contractor shall also meet with the Commission to present the findings, conclusions, and recommendations. Both the final meeting and the Final Report must be consummated on or before the termination date of the contract. Final Report specifications and meeting are detailed in the Exhibit A, Work Statement and Attachment A-2, Final Report Format.

D. All reports, including reprints, shall include the following legend:

LEGAL NOTICE

THIS REPORT WAS PREPARED AS A RESULT OF WORK SPONSORED BY THE CALIFORNIA ENERGY COMMISSION (COMMISSION). IT DOES NOT NECESSARILY REPRESENT THE VIEWS OF THE COMMISSION, ITS EMPLOYEES, OR THE STATE OF CALIFORNIA. THE COMMISSION, THE STATE OF CALIFORNIA, ITS EMPLOYEES, CONTRACTORS, AND SUBCONTRACTORS MAKE NO WARRANTY, EXPRESS OR IMPLIED, AND ASSUME NO LEGAL LIABILITY FOR THE INFORMATION IN THIS REPORT; NOR DOESANY PARTY REPRESENT THAT THE USE OF THIS INFORMATION WILL NOT INFRINGE UPON PRIVATELY OWNED RIGHTS. THIS REPORT HAS NOT BEEN APPROVED OR DISAPPROVED BY THE COMMISSION NOR HAS THE COMMISSION PASSED UPON THE ACCURACY OR ADEQUACY OF THE INFORMATION IN THIS REPORT.

15. RECORDKEEPING, COST ACCOUNTING AND AUDITING

A. Cost Accounting

Contractor agrees to keep separate, complete, and correct accounting of the costs involved in developing, installing, constructing, and testing of project-related product(s) funded under the Commission-funded portion of this contract as well as keep separate, complete, and correct account of the economic benefit(s) from project-related product(s) and right(s). The Commission shall have the right to examine Contractor's books of accounts at all reasonable times to the extent and as is necessary to verify the accuracy of Contractor's reports.

B. Accounting Procedures

The Contractor s costs shall be determined on the basis of the Contractor s accounting system procedures and practices employed as of the effective date of this contract. The Contractor s cost accounting practices used in accumulating and reporting costs during the performance of this contract shall be consistent with the practices used in estimating costs for any proposal to which this contract relates; provided that such practices are consistent with the other terms of this contract and provided, further, that such costs may be accumulated and reported in greater detail during performance of this contract. The Contractor s accounting system shall distinguish between direct costs and indirect costs. All costs incurred for the same purpose, in like circumstances, are either direct costs only or indirect costs only with respect to costs incurred under this contract.

C. Allowability of Costs

1) Allowable Costs

The costs for which the Contractor shall be reimbursed under this contract include all costs, direct and indirect, incurred in the performance of work that are identified in the Contractor's proposal and contract Exhibit C, Budget.. Costs must be incurred within the term of the contract. Factors to be considered in determining whether an individual item of cost is allowable include (i) reasonableness of the item, (ii) allocability of the item to the work, (iii) the Contractor's use of applicable Federal OMB Circulars A-87, A-21, A-122 or FAR Part 31, and (iv) the other terms and conditions of this contract.

2) Unallowable Costs

The following is a description of some specific items of cost that are unallowable; provided, however, that the fact that a particular item of cost is not included shall not mean that it is allowable. Details concerning the allowability of costs are available from the Commission Accounting Office.

a) Contingency Costs, Imputed Costs, Fines and Penalties, Losses on Contracts, and Excess Profit Taxes are unallowable.

- b) The Commission will pay for State or local sales or use taxes on the services rendered or equipment, parts or software supplied to the Commission pursuant to this contract. The State of California is exempt from Federal excise taxes.
- 3) Except as provided for in this contract, Contractor shall use the Federal OMB Circulars A-87, A-21, A-122 or FAR Part 31 in determining allowable and unallowable costs.

D. Audit Rights

Contractor shall maintain books, records, documents, and other evidence, based on the procedures set forth above, sufficient to reflect properly all costs claimed to have been incurred in performing this contract. The Commission, an agency of the State or, at the Commission s option, a public accounting firm designated by Commission, may audit such accounting records at all reasonable times with prior notice by Commission. Commission shall bear the expense of such audits. It is the intent of the parties that such audits shall ordinarily be performed not more frequently than once every twelve (12) months during the performance of the work and once at any time within three (3) years following payment by Commission of the Contractor's final invoice. However, performance of any such interim audits by Commission does not preclude further audit.

Contractor agrees that the Commission, the Department of General Services, the Bureau of State Audits, or their designated representative shall have the right to review and to copy any records and supporting documentation pertaining to the performance of this contract. Contractor agrees to maintain such records for possible audit for a minimum of three (3) years after final payment, unless a longer period of record retention is stipulated. Contractor agrees to allow the auditor(s) access to such records during normal business hours and to allow interviews of any employees who might reasonably have information related to such records. Further, Contractor agrees to include a similar right of the State to audit records and interview staff in any subcontract related to performance of this contract. (GC 8546.7, PCC 10115 et seq., CCR Title 2, Section 1896)

E. Refund to Commission

If Commission determines, pursuant to subarticle C or otherwise, that any invoiced and paid amounts exceed the actual allowable incurred costs and earned fixed fees (if any), Contractor shall repay such amounts to Commission within thirty (30) days of request or as otherwise agreed by the Commission and Contractor. If Commission does not receive such repayments, Commission shall be entitled to withhold further payments to the Contractor.

F. Audit Cost

The cost of the audit shall be borne by the Commission except when the results of the audit reveal an error detrimental to the Commission exceeding more than ten percent (10%) or \$5,000 (whichever is greater) of 1) the amount audited, or 2) if a royalty audit, the total royalties due in the period audited. In these exceptions, Contractor agrees to reimburse Commission for reasonable costs and expenses incurred by the Commission in conducting such audit.

16. BUSINESS ACTIVITY REPORTING

A. Contractor shall promptly notify the Commission Contract Manager of the occurrence of each of the following:

- 1) A change of address.
- 2) A change in the business name or ownership.
- 3) The existence of any litigation or other legal proceeding affecting the project.
- 4) The occurrence of any casualty or other loss to project personnel, equipment or third parties of a type commonly covered by insurance.
- 5) Contractor s receipt of notice of any claim or potential claim against Contractor for patent, copyright, trademark, service mark and/or trade secret infringement that could affect the Commission s rights.
- B. Contractor shall not change or reorganize the type of business entity under which it does business except upon prior written notification to the Commission. A change of business entity or name change requires an amendment assigning or novating the contract to the changed entity. In the event the Commission is not satisfied that the new entity can perform as the original Contractor, the Commission may terminate this contract as provided in the Termination clause.

17. REVIEW AND NOTICE OF CONFLICTING TERMS

Contractor warrants and attests that it has conducted a detailed review of the terms and conditions of its existing project related third party agreements and has identified all known or reasonably foreseeable conflicts with this contract s terms and conditions and has disclosed the conflicts in writing to the Commission prior to executing this contract. In the event further conflicts are identified, Contractor and Commission agree that these conflicts shall be addressed using the procedure described in the Disputes clause. Nothing in this contract is intended to nullify or obviate any prior third party agreements executed by Contractor. However, the Commission is free to terminate this contract if the conflict impairs or diminishes the value of this contract.

18. CONFIDENTIALITY

A. Determination

The Commission Executive Director makes the final determination of confidentiality. In the event there is a disagreement over the items to be delivered under the contract, the parties shall use the Disputes clause. Those items to be delivered as confidential shall be subject to the Commission Executive Director's determination of confidentiality. If the Contractor wishes to appeal the Executive Director's determination, the appeal shall be made to the full Commission. If the Contractor disagrees with this determination, the Contractor may seek judicial review as per Title 20 CCR 2506, et seq.

AND

The Commission Contract Manager and the Contractor will identify pre-existing confidential or proprietary items to be delivered under this contract.

Or

The Contractor has not identified any confidential or proprietary items to be delivered under this contract.

Or

The Commission agrees to keep confidential the items listed in Exhibit E.

B. Public and Confidential Deliverables

Only those items specifically listed in Exhibit E or in a subsequent determination of confidentiality qualify as confidential deliverables. All deliverables including, but not limited to, progress reports, task deliverables and the Final Report shall not contain confidential information except when the Commission Contract Manager and the Contractor deem it necessary to include confidential information in a deliverable. In such event, the Contractor shall prepare the deliverable in two separate volumes, one for public distribution and one to be maintained in the Commission's confidential records.

C. Future Confidential Information

The Contractor and the Commission agree that during this contract, it is possible that the Contractor may develop additional data or information that the Contractor considers to be protectable as confidential information. The Commission Contract Manager shall provide a copy of the Commission Application for Confidential Designation to the Contractor Project Director. Contractor must list all items and information along with justification for confidentiality and submit the application to the Commission Contract Manager. The Commission Executive Director makes the final determination of confidentiality. Such subsequent determinations will be added to Exhibit E.

D. Identifying and Submitting Confidential Information

All confidential information submitted by the Contractor shall be marked Confidential on each document containing the confidential information and delivered in a sealed package to the Commission Contract Officer identified in Exhibit D. The Commission Contract Officer will notify the Commission Contract Manager that the confidential information has been received and is in the Contracts Office for review. The confidential information will only be available to those persons authorized by the Executive Director.

19. INTELLECTUAL PROPERTY ITEMS DEVELOPED PRIOR TO THIS CONTRACT

- A. The Commission makes no claim to intellectual property that existed prior to this contract and was developed without Commission funding.
- B. The Contractor gives notice that the items listed in Exhibit E have been developed without Commission funding and prior to the start of this contract. This list represents a brief description of the prior developed intellectual property. A detailed description of the intellectual property, as it exists on the effective date of this contract, may be necessary if Commission funds are used to further develop the listed intellectual property. This information will assist the parties make an informed decision regarding intellectual property rights and possible repayment obligations.

Or

B. Contractor has not identified any pre-existing intellectual property.

20. RIGHTS OF PARTIES REGARDING INTELLECTUAL PROPERTY

A. Commission s Rights in Deliverables

Deliverables and reports specified for delivery to the Commission under this contract shall become the property of the Commission. The Commission may use, publish, and reproduce the deliverables and reports subject to the provisions of subclause C.

- B. Rights in Technical, Generated, and Deliverable Data
 - 1) Contractor s Rights

All data (i.e., technical, generated and deliverable data) produced under this contract shall be the property of the Contractor, limited by the license retained by the Commission in 2) below, and the rights the Commission has in deliverables specified above in A).

2) Commission s Rights

Contractor shall provide the Commission with a copy of all technical, generated and deliverable data produced under the contract. Contractor does not have to copy and submit data the Commission Contract Manager has identified as being unusable to the Commission and the PIER program. For instance, some data may not warrant routine copying and shipping because the raw data is too disaggregated or voluminous for practical application. Retention of such data at the Contractor's facility for

inspection, review and possible copying by the Contract Manager is expected to be a more efficient use of Commission staff and the Contractor s time and efforts.

For all data (technical, generated and deliverable) produced under this contract, the Commission retains a no-cost, non-exclusive, non-transferable, irrevocable, royalty-free, worldwide, perpetual license to use, publish, translate, produce and to authorize others to produce, translate, publish and use the data, subject to the provisions of subclause C.

C. Limitations on Commission Disclosure of Contractor's Confidential Records

- Data provided to the Commission by Contractor, which data the Commission has not already agreed to keep confidential and which Contractor seeks to have designated as confidential, or is the subject of a pending application for confidential designation, shall not be disclosed by the Commission except as provided in Title 20 CCR Sections 2506 and 2507 (or as they may be amended), unless disclosure is ordered by a court of competent jurisdiction.
- It is the Commission s intent to use and release project results such as deliverables and data in a manner calculated to further PIER while protecting proprietary or patentable interests of the parties. Therefore, the Commission agrees not to disclose confidential data or the contents of reports containing data considered by Contractor as confidential, without first providing a copy of the disclosure document for review and comment by Contractor. Contractor shall have no less than 10 working days for review and comment and, if appropriate, to make an application for confidential designation on some or all of the data. The Commission shall consider the comments of Contractor and use professional judgment in revising the report, information or data accordingly.

D. Exclusive Remedy

In the event the Commission intends to publish or has disclosed data the Contractor considers confidential, the Contractor s exclusive remedy is a civil court action for injunctive relief. Such court action shall be filed in Sacramento County, Sacramento, California.

E. Waiver of Consequential Damages

IN NO EVENTWILL THE ENERGY COMMISSION BE LIABLE FOR ANY SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES BASED ON BREACH OF WARRANTY, BREACH OF CONTRACT, NEGLIGENCE, STRICT TORT, OR ANY OTHER LEGAL THEORY FOR THE DISCLOSURE OF CONTRACTOR'S CONFIDENTIAL RECORDS, EVEN IF THE ENERGY COMMISSION HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGE. DAMAGES THAT THE ENERGY COMMISSION WILL NOT BE RESPONSIBLE FOR INCLUDE, BUT ARE NOT LIMITED TO, LOSS OF PROFIT; LOSS OF SAVINGS OR REVENUE; LOSS OF GOODWILL; LOSS OF USE OF THE PRODUCT OR ANY ASSOCIATED EQUIPMENT; COST OF CAPITAL; COST OF ANY SUBSTITUTE EQUIPMENT, FACILITIES, OR SERVICES; DOWNTIME; THE CLAIMS OF THIRD PARTIES INCLUDING CUSTOMERS; AND INJURY TO PROPERTY.

F. Limitations on Contractor Disclosure of Contract Data, Information, Reports and Records

1) Contractor will not disclose the contents of the final or any preliminary deliverable or report without first providing a copy of the disclosure document for review and comment to the Commission Contract Manager. The Contractor shall consider the comments of the Commission Contract Manager and use professional judgment in revising the reports, information or data accordingly.

- 2) After any document submitted has become a part of the public records of the State, Contractor may, if it wishes to do so at its own expense, publish or utilize the same, but shall include the legal notice stated above.
- Notwithstanding the foregoing, in the event any public statement is made by the Commission as to the role of Contractor or the content of any preliminary or Final Report of Contractor hereunder, Contractor may, if it believes such statement to be incorrect, state publicly what it believes is correct.
- 4) No record that is provided by the Commission to Contractor for Contractor s use in executing this contract and which has been designated as confidential, or is the subject of a pending Application for Confidential Designation, except as provided in Title 20, CCR Sections 2506 and 2507, shall be disclosed, unless disclosure is ordered by a court of competent jurisdiction (Title 20 CCR Section 2501, et seq.). At the election of the Commission Contract Manager, the Contractor, its employees and any subcontractor shall execute a Confidentiality Agreement, supplied by the Commission Contract Manager.
- 5) Contractor acknowledges that each of its officers, employees, and subcontractors who are involved in the performance of this contract will be informed about the restrictions contained herein and to abide by the above terms.

G. Proprietary Data

Proprietary data owned by the Contractor shall remain with the Contractor throughout the term of this contract and thereafter. The extent of Commission access to the same and the testimony available regarding the same shall be limited to that reasonably necessary to demonstrate, in a scientific manner to the satisfaction of scientific persons, the validity of any premise, postulate or conclusion referred to or expressed in any deliverable hereunder.

H. Preservation of Data

Any data which is reserved to the Contractor by the express terms hereof, and pre-existing proprietary or confidential data which has been utilized to support any premise, postulate or conclusion referred to or expressed in any deliverable hereunder, shall be preserved by the Contractor at the Contractor's own expense for a period of not less than three years after receipt and approval by the Commission of the Final Report herein.

I. Destruction of Data

Before the expiration of three years and before changing the form of or destroying any such data, the Contractor shall notify Commission of any such contemplated action and Commission may, within thirty (30) days after said notification, determine whether it desires said data to be further preserved. If Commission so elects, the expense of further preserving said data shall be paid for by the Commission. Contractor agrees that Commission may at its own expense, have reasonable access to said data throughout the time during which said data is preserved. Contractor agrees to use its best efforts to identify competent witnesses to testify in any court of law regarding said data or, at Commission's expense, to furnish such competent witnesses.

J. Patent Rights

Patent rights for subject inventions will be the property of Contractor, subject to the Commission retaining a no-cost, nonexclusive, nontransferable, irrevocable royalty-free, worldwide perpetual license to use or have practiced for or on behalf of the State of California the subject invention(s) for governmental purposes. Contractor must obtain agreements to effectuate this clause with all persons or entities, except for the U.S. Department of Energy (DOE), obtaining ownership interest in the patented subject invention(s). Previously

documented (whether patented or unpatented under the patent laws of the United States of America or any foreign country) inventions are exempt from this provision.

K. March-In Rights

The Contractor shall forfeit and assign to the Commission, at the Commission's request, all rights on a subject invention if either: 1) Contractor fails to apply for a patent on subject inventions(s) developed under this contract within six months of conceiving or first actually reducing to practice the technology or 2) Contractor or assignee has not taken, or is not expected to take within a reasonable time, effective steps to achieve practical application of the subject invention. In this event, the Contractor agrees to relinquish all rights, subject to DOE reserved rights, on the subject invention to the Commission. The Commission will have the unfettered right to use and/or dispose of the rights in whatever manner it deems most suitable to help transfer the technology into the market place, including but not limited to, seeking patent protection, or licensing the invention.

L. Commission's Rights to Invention.

Contractor and all persons and/or entities obtaining an ownership interest in subject invention(s) shall include within the specification of any United States patent application, and any patent issuing thereon covering a subject invention, the following statement:

"This invention was made with State of California support under California Energy Commission contract number 'knumber'. The Energy Commission has certain rights to this invention."

M. Commission s Interest in Inventions.

Upon the perfecting of a patent application on any subject invention, Contractor will complete and sign a Uniform Commercial Code (UCC.1) Financing Statement and submit it to the Commission Contract Manager for complete processing. The Commission Contract Manager will review the UCC.1 for complete information and file the satisfactory UCC.1 with the Secretary of State s°Office.

N. Copyrights

- 1) Copyrightable material first produced under this contract shall be owned by the Contractor, limited by the license granted to the Commission in 2) below.
- 2) Contractor agrees to grant the Commission a royalty-free, no-cost nonexclusive, irrevocable, nontransferable worldwide, perpetual license to produce, translate, publish, use and dispose of, and to authorize others to produce, translate, publish, use and dispose of all copyrightable material first produced or composed in the performance of this contract.
- 3) Contractor will apply copyright notices to all deliverables using the following form or such other form as may be reasonably specified by Commission.

©[YEAR OF FIRST PUBLICATION OF DELIVERABLE], [THE COPYRIGHT HOLDER S NAME]. ALL RIGHTS RESERVED.

4) Software

In the event software is developed that is not a deliverable under the contract, Contractor shall have the right to copyright and/or patent such software and grants the Commission a royalty-free, no-cost, non-exclusive, irrevocable, non-transferable, worldwide, perpetual license to produce and use the software, its derivatives and upgrades for governmental purposes.

O. Intellectual Property Indemnity

Contractor warrants that Contractor will not, in its supplying of the work under this contract s work statement, knowingly infringe or misappropriate any intellectual property right of a third party, and that it will conduct a reasonable investigation of the intellectual property rights of third parties to avoid such infringement. Contractor will defend and indemnify Commission from and against any claim, lawsuit or other proceeding, loss, cost, liability or expense (including court costs and reasonable fees of attorneys and other professionals) to the extent arising out of: (i) any third party claim that a deliverable infringes any patent, copyright, trade secret or other intellectual property right of any third party, or (ii) any third party claim arising out of the negligent or other tortious act(s) or omission(s) by the Contractor, its employees, subcontractors or agents, in connection with or related to the deliverables or the Contractor s performance thereof under this contract.

21. ROYALTY PAYMENTS TO COMMISSION

In consideration of Commission providing funding to Contractor, Contractor agrees to pay Commission royalties on the terms and conditions hereinafter set forth.

- A. Contractor agrees to pay Commission a royalty of 1.5% (one and one-half percent) of the Sale Price on the sale of each and every project-related product or right.
- B. Contractor s obligation to make payments to Commission shall commence from the date project related products or rights are first sold and shall extend for a period of fifteen years thereafter. Payments are payable in annual installments and are due the first day of March in the calendar year immediately following the year during which Contractor receives gross revenues.
- C. Early Buyout. Contractor has the option of paying its royalty obligations to Commission without a pre-payment penalty, provided Contractor makes the payment within two years from the date at which royalties are first due to Commission, in the lump sum amount equal to two (2) times the amount of funds drawn down on the contract.
- D. Contractor agrees not to make any sale, license, lease, gift or other transfer of any Project-Related Products and Rights with the intent of, or for the purpose of, depriving Commission of royalties hereunder. Generally, this means that Contractor will not make any sale, license, lease or other transfer of Project-Related Products and Rights for consideration other than fair market value. Further, Contractor agrees that such activity constitutes breach of this contract and that Contractor agrees to repay within 60 days the amount due under subclause C above (Early Buyout).
- E. Contractor acknowledges that a late payment of royalties owed to the Commission will cause the Commission to incur costs not contemplated by the parties. If a royalty payment is not paid when due, Contractor agrees to pay the Commission a late fee equal to two percent (2%) of the payment due. Additionally, Contractor agrees that royalty payments not paid within fifteen (15) days of the due date shall thereupon become debt obligations of Contractor to the Commission, due upon demand and bearing interest at the maximum interest rate allowed by law
- F. Contractor shall maintain separate accounts within its financial and other records for purposes of tracking components of sales and royalties due to Commission under this contract.
- G Payments to Commission are subject to audit as provided for under the Recordkeeping, Cost Accounting and Auditing clause.
- H. In the event of default hereunder, Commission shall be free to exercise all rights and remedies available to it herein, and under law and at equity. The occurrence of any of the following events or conditions shall cause default under this contract:

 Contractor s failure to pay when due, any amount due and payable under the terms of this contract.

22. NOTICES TO PARTIES

Notice to either party may be given by certified mail properly addressed, postage fully prepaid, to the address designated in Exhibit D for each respective party or to such other address as either party shall notify the other in accordance with this section. Such notice shall be effective when received, as indicated by post office records, or if deemed undeliverable by post office, such notice shall be effective nevertheless fifteen (15) days after mailing.

Alternatively, notice may be given by personal delivery to the party at the address designated in Exhibit D. Such notice shall be deemed effective when delivered unless a legal holiday for State offices commences during said 24-hour period, in which case the effective time of the notice shall be postponed 24 hours for each such intervening day.

23. DISPUTES

In the event of a contract dispute or grievance between the Contractor Project Director and Commission Contract Manager, the parties shall use any or all of the following procedures:

A. Commission Dispute Resolution

If the Commission Contract Manager and the Contractor Project Director cannot resolve a contract dispute or grievance, Contractor Project Director and Commission Contract Manager shall each prepare a package in writing stating the issues in dispute, the legal authority or other basis for their respective positions and the remedy sought. The packages must be submitted to the Commission Dispute Resolution Committee. The Commission Contract Manager will notify the Contractor Project Director of the current Committee members. The Committee shall make a determination on the problem within ten (10) working days after receipt of the package.

If Contractor disagrees with the Committee's decision, Contractor may appeal to the full Commission at a regularly scheduled business meeting. The Committee will provide the Contractor with the current procedures for placing the appeal on a Commission Business Meeting Agenda.

Contractor shall continue with its responsibilities under this contract during any dispute.

B. Binding Arbitration

Should the Commission's Dispute Resolution procedure identified in subClause A. above fail to resolve a contract dispute or grievance to the satisfaction of the Contractor, the parties must mutually agree to have the dispute or grievance resolved through binding arbitration. The arbitration proceeding shall take place in Sacramento County, California, and shall be governed by the commercial arbitration rules of the American Arbitration Association (AAA) in effect on the date the arbitration is initiated. One (1) arbitrator who is an expert in the particular field of the dispute or grievance shall resolve the dispute or grievance. The arbitrator shall be selected in accordance with the aforementioned commercial arbitration rules. The decision rendered by the arbitrator shall be final, and judgment may be entered upon it in accordance with the applicable law in any court having jurisdiction thereof. The demand for arbitration shall be made no later than six (6) months after the date of the contract s termination, irrespective of when the dispute or grievance arose, and irrespective of the applicable statute of limitations for a suit based on the dispute or grievance.

The cost of arbitration shall be borne by the parties as follows:

- 1) The AAA's administrative fees shall be borne equally by the parties:
- 2) The expense of a stenographer shall be borne by the party requesting a stenographic record;
- 3) Witness expenses for either side shall be paid by the party producing the witness;
- 4) Each party shall bear the cost of its own travel expenses;
- All other expenses shall be borne equally by the parties, unless the arbitrator apportions or assesses the expenses otherwise as part of his or her award.

At the option of the parties, any or all of these arbitration costs may be deducted from any balance of contract funds. Both parties must agree, in writing, to utilize contract funds to pay for arbitration costs.

24. STOP WORK

The Commission Contract Officer may, at any time, by written notice to Contractor, require Contractor to stop all or any part of the contract s work tasks. Stop Work Orders may be issued for reasons such as a project exceeding budget, standard of performance, out of scope work, delay in project schedule, misrepresentations, etc.

A. Compliance

Upon receipt of such stop work order, Contractor shall immediately take all necessary steps to comply therewith and to minimize the incurrence of costs allocable to work stopped.

B. Equitable Adjustment

An equitable adjustment shall be made by Commission based upon a written request by Contractor for an equitable adjustment. Contractor must make such adjustment request within thirty (30) days from the date of receipt of the stop work notice.

C. Terminating a Stop Work Order

Contractor shall resume the stopped work only upon receipt of written instructions from the Commission's Contract Officer terminating the stop work order.

25. TERMINATION

A. Breach

The Commission shall provide the Contractor written notice of intent to terminate due to Contractors breach. Contractor will have 15 calendar days to fully perform or cure the breach. In the event Contractor does not cure the breach within 15 days, the Commission may, without prejudice to any of its other remedies, terminate this contract upon five (5) calendar days written notice to Contractor. In such event, Commission shall pay Contractor only the reasonable value of the satisfactorily performed services theretofore rendered by Contractor, as may be agreed upon by the parties or determined by a court of law, but not in excess of the contract maximum payable.

B. For Cause

The Commission may, for cause, and at its option, terminate this contract upon giving thirty calendar (30) days advance written notice to Contractor. In such event, Contractor agrees to use all reasonable efforts to mitigate its expenses and obligations. Commission will pay Contractor for services rendered and expenses incurred within the terms of the work statement and which were satisfactorily performed prior to such notice of termination which could not by reasonable efforts of Contractor have been avoided, but not in excess of contract maximum payable. Contractor agrees to relinquish possession of equipment purchased for

this project with Commission funds to Commission, or Contractor may, with approval of Commission, purchase said equipment as provided by the terms of this contract.

The term for cause includes, but is not limited to, the following reasons:

- Partial or complete loss of match funds;
- Significant change in State or Energy Commission policy such that the work or product being funded would not be supported by the Commission;
- Reorganization to a business entity unsatisfactory to the Commission;
- The retention or hiring of subcontractors, or the replacement or addition of Key Personnel that fail to perform to the standards and requirements of this contract; or
- Failure to utilize the DVBE subcontractors/vendors in Contractor's proposal.

C. Bankruptcy

In the event proceedings in bankruptcy are commenced against Contractor, Contractor is adjudged bankrupt, or a receiver is appointed and qualifies, then Commission may terminate this contract and all further rights and obligations hereunder, by giving five (5) calendar days notice in writing in the manner specified herein. It is recognized by the parties that the Commission shall have lien rights on equipment purchased with Commission funds for this project and the Commission shall retain lien rights until Contractor either returns said equipment to Commission or purchases it as is provided by the terms of this contract.

D. Gratuities

The Commission may, by written notice to Contractor, terminate the right of Contractor to proceed under this contract if it is found, after notice and hearing by Commission or by Executive Director of the Energy Commission or his duly authorized representative, that gratuities were offered or given by Contractor, or any agent or representative of Contractor, to any officer or employee of the Commission, with a view toward securing a contract or securing favorable treatment with respect to awarding or amending or making a determination with respect to performance of such contract.

In the event this contract is terminated as provided herein, Commission shall be entitled to (1) pursue the same remedies against Contractor as it could pursue in the event of the breach of the contract by Contractor, and (2) exemplary damages in an amount which shall be not less than three nor more than ten times the cost incurred by Contractor in providing any such gratuities to any such officer or employee, as a penalty, in addition to any other damages to which it may be entitled by law.

The rights and remedies of Commission provided in this clause shall not be exclusive and are in addition to any other rights and remedies provided by law or under this contract.

E. Advantage

Contractor, team member or subcontractors shall not hire, contract with, or otherwise commit themselves to an advantageous economic contract with the Commission's Contractor/subcontractor who evaluated Contractor's proposal. The Commission reserves the right to cancel the contract.

26. GENERAL TERMS & CONDITIONS

A. It is understood and agreed that certain contract provisions shall survive the completion or termination date of this contract for any reason. The contract provisions include, but are not limited to:

| • | Payments to Contractor | Clause 5 |
|---|---|-----------|
| • | Purchase of Equipment | Clause 7 |
| • | Recordkeeping, Cost Accounting and Auditing | Clause 15 |
| | = / AA BAA | |

| • | Business Activity Reporting | Clause 16 |
|---|---|--------------|
| • | Rights of Parties Regarding Intellectual Property | Clause 20 |
| • | Royalty Payments to Commission | Clause 21 |
| • | Disputes | Clause 23 |
| • | Termination | Clause 25 |
| • | Site Access | Clause 26. D |
| • | Indemnification | Clause 26. L |

- B. The clause headings appearing in this contract have been inserted for the purpose of convenience and ready reference. They do not purport, and shall not be deemed, to define, limit, or extend the scope or intent of the clauses to which they appertain.
- C. If public hearings on the subject matter dealt with in this contract are held during the period of the contract, and if requested by the Commission, Contractor will make available to testify the personnel assigned to this contract. Commission will reimburse Contractor for labor and travel of said personnel at the contract rates for such work.
- D. The Energy Commission staff or its representatives shall have reasonable access to the construction site or R&D laboratory, and all project records.
- E. This contract shall be conducted in accordance with the terms and conditions of California Energy Resources Conservation and Development Commission (hereafter "Commission") Request for Proposal number 500-00-509, Contractor's proposal, dated <u>propsldate</u>, this contract, and the attached exhibits listed below. Contractor's proposal is not attached hereto, but is expressly incorporated by reference into this contract. In the event of conflict or inconsistency between the terms of this contract and Contractor's proposal, this contract and its exhibits shall be considered controlling.
- F. In the interpretation of this contract, any inconsistencies between the terms hereof and the exhibits shall be resolved in favor of the terms hereof.
- G The Commission reserves the right to seek further written assurances from the Contractor and its team that the work of the project under the contract will be performed consistent with the terms of the contract.
- H. No alteration or variation of the terms of this contract shall be valid unless made in writing and signed by the parties hereto, and no oral understanding or agreement not incorporated herein, shall be binding on any of the parties hereto. Other than as specified herein, no document or communication passing between the parties hereto shall be deemed as part of this contract.
- I. This contract is not assignable by the Contractor, either in whole or in part, without the consent of the State. Consent consists of a formal written contract amendment approved by the Commission and DGS. Such consent shall not be unreasonably withheld.
- J. It is hereby understood and agreed that this contract shall be governed by the laws of the State of California as to interpretation and performance.
- K. Time is of the essence in this contract.
- L. Contractor agrees to indemnify, defend and save harmless the State, its officers, agents and employees from any and all claims and losses accruing or resulting to any and all contractors, subcontractors, suppliers, laborers, and any other person, firm or corporation furnishing or supplying work services, materials, or supplies in connection with the performance of this contract, and from any and all claims and losses accruing or resulting to any person, firm or corporation who may be injured or damaged by Contractor in the performance of this contract.

- M. Contractor warrants, represents and agrees that it and its subcontractors, employees and representatives shall at all times comply with all applicable State contracting laws, codes, rules and regulations in the performance of this contract.
- N. Contractor, and the agents and employees of Contractor, in the performance of this contract, shall act in an independent capacity and not as officers or employees or agents of the State.
- O. No waiver of any breach of this contract shall be held to be a waiver of any other or subsequent breach. All remedies afforded in this contract shall be taken and construed as cumulative, that is, in addition to every other remedy provided therein or by law. The failure of Commission to enforce at any time any of the provisions of this contract, or to require at any time performance by Contractor of any of the provisions therefore, shall in no way be construed to be a waiver of such provisions, nor in any way affect the validity of this contract or any part thereof or the right of Commission to thereafter enforce each and every such provision.
- P. If any provision of this contract or the application thereof is held invalid, that invalidity shall not affect other provisions of the contract.
- Q. In no event shall any course of dealing, custom or trade usage modify, alter, or supplement any of the terms or provisions contained herein.
- R. During the performance of this Agreement, Contractor and its subcontractors shall not unlawfully discriminate, harass, or allow harassment against any employee or applicant for employment because of sex, race, color, ancestry, religious creed, national origin, physical disability (including HIV and AIDS), mental disability, medical contract, Contractor and its subcontractors shall not unlawfully discriminate against any employee or applicant for employment because of race, religion, color, national origin, ancestry, physical handicap, medical condition, marital status, age (over 40) or sex. Contractors and subcontractors shall insure that the evaluation and treatment of their employees condition (cancer), age (over 40), marital status, and denial of family care leave. Contractor and subcontractors shall insure that the evaluation and treatment of their employees and applicants for employment are free from such discrimination and harassment. Contractor and subcontractors shall comply with the provisions of the Fair Employment and Housing Act (Government Code Section 12990 (a-f) et seq.) and the applicable regulations promulgated thereunder (California Code of Regulations, Title 2, Section 7285 et seq.). The applicable regulations of the Fair Employment and Housing Commission implementing Government Code Section 12990 (af), set forth in Chapter 5 of Division 4 of Title 2 of the California Code of Regulations, are incorporated into this Agreement by reference and made a part hereof as if set forth in full. Contractor and its subcontractors shall give written notice of their obligations under this clause to labor organizations with which they have a collective bargaining or other Agreement.
- S. Contractor shall include the nondiscrimination and compliance provisions of this clause in all subcontracts to perform work under the Agreement.
- T. The Contractor shall certify in writing under penalty of perjury, the minimum, if not exact, percentage of recycled content, both post consumer waste and secondary waste as defined in the Public Contract Code, Sections 12161 and 12200, in materials, goods, or supplies offered or products used in the performance of this Agreement, regardless of whether the product meets the required recycled product percentage as defined in the Public Contract Code, Sections 12161 and 12200. Contractor may certify that the product contains zero recycled content. (PCC 10233, 10308.5, 10354)
- U. For any contract in excess of \$100,000, the contractor acknowledges in accordance with, that:

- the contractor recognizes the importance of child and family support obligations and shall fully comply with all applicable state and federal laws relating to child and family support enforcement, including, but not limited to, disclosure of information and compliance with earnings assignment orders, as provided in Chapter 8 (commencing with Section 5200) of Part 5 of Division 9 of the Family Code; and
- 2) the contractor, to the best of its knowledge is fully complying with the earnings assignment orders of all employees and is providing the names of all new employees to the New Hire Registry maintained by the California Employment Development Department."
- V. The Government Code Chapter on Antitrust claims contains the following definitions:
 - Public purchase means a purchase by means of competitive bids of goods, services, or materials by the State or any of its political subdivisions or public agencies on whose behalf the Attorney General may bring an action pursuant to subdivision (c) of Section 16750 of the Business and Professions Code).
 - Public Purchasing Body means the State or the subdivision or agency making a public purchase. Government Code Section 4550 (b).
 - In submitting a bid to a public purchasing body, the bidder offers and agrees that if the bid is accepted, it will assign to the purchasing body all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C. Sec. 15) or under the Cartwright Act (Chapter 2 (commencing with Section 16700) of Part 2 of Division 7 of the Business and Professions Code), arising from purchases of goods, materials, or services by the bidder for sale to the purchasing body pursuant to the bid. Such assignment shall be made and become effective at the time the purchasing body tenders final payment to the bidder. Government Code Section 4552.
 - If an awarding body or public purchasing body receives, either through judgment or settlement, a monetary recovery for a cause of action assigned under this chapter, the assignor shall be entitled to receive reimbursement for actual legal costs incurred and may, upon demand, recover from the public body any portion of the recovery, including treble damages, attributable to overcharges that were paid by the assignor but were not paid by the public body as part of the bid price, less the expenses incurred in obtaining that portion of the recovery. Government Code Section 4553.
 - 3) Upon demand in writing by the assignor, the assignee shall, within one year from such demand, reassign the cause of action assigned under this part if the assignor has been or may have been injured by the violation of law for which the cause of action arose and (a) the assignee has not been injured thereby, or (b) the assignee declines to file a court action for the cause of action. Government Code Section 4554.
- Y. In the event that any provision of this Contract is unenforceable or held to be unenforceable, then the parties agree that all other provisions of this Contract have force and effect and shall not be effected thereby.

Attachment 8 EXHIBIT A WORK STATEMENT

OVERALL PROJECT GOALS

The overall goal of this project is to This research supports PIER program objectives

TECHNICAL AND ECONOMIC PERFORMANCE OBJECTIVES

The overall technical goal of this project is to:

•

The specific, technical objectives upon which this project s success will be evaluated are:

•

The specific technical performance objective for this project is to:

•

The overall economic/cost goal of this project is to:

•

The specific, economic/cost objectives upon which project s success will be evaluated are:

•

The specific economic performance objective for this project is to:

ullet

TASK 1: PROJECT START-UP

Subtask 1.1 Attend Kick off Meeting

The objective of this task is to identify procedures for communication and reporting project status during the contract.

The Contractor shall attend a kick off meeting with the Commission Contract Manager and the Contracts Officer to review: 1) the Commission's expectations for accomplishing tasks described in the Work Statement; 2) the administrative requirements in the terms and conditions of the contract (e.g., invoicing, UCC.1 form filing, prior approvals, data disclosure limitations, progress reporting format and content, etc.); and 3) the Commission's roles and responsibilities. The Commission Contract Manager shall designate the location of this meeting.

Deliverable: Attend kick-off meeting

Key Personnel: Key Subcontractors:

Subtask 1.2 Document Matching Funds

(Note: This task does not apply to projects that do not have match funds and can be deleted.)

The objective of this task is to document the match funds for this contract.

- The Contractor need not resubmit match fund documentation if it was provided in the Contractor's proposal and the information submitted is still valid. The Contractor, however, shall assist the Commission Contract Manager to locate this proposal information, upon request.
- In the event match fund sources change during the contract term, Contractor shall immediately notify the Commission Contract Manager for approval.

Documentation of match fund commitments shall be received, reviewed and approved in writing by the Commission Contract Manager before any PIER funds under this contract are disbursed and PIER-funded work on technical tasks may begin.

The Contractor shall provide the following information about the match funding to be used to conduct this project:

- 1. Amount and source of each cash match funding, including a contact name, address and telephone number.
- 2. Description, documented market or book value, and source of each in-kind contribution, including a contact name, address and telephone number.

If the in-kind contribution is equipment or other tangible or real property, Contractor shall identify its owner and provide a contact name, address and telephone number, and the address where the property is located.

3. Written commitment from each source of cash match funding or in-kind contributions that these funds or contributions have been secured or will be secured prior to the date(s) when the funds or in-kind contributions are required for project expenditures.

In the event the Contractor has not provided the written match fund commitments for this project by three months after the contract execution date, the Commission may, at its option and in its unfettered discretion, terminate this contract by advising Contractor in writing that the contract will be terminated in thirty (30) calendar days.

Deliverables: Letter and documentation confirming matching fund sources.

Documentation of changes as they occur during the contract term.

(Note: Tasks 1.3 and 1.4 do not apply if the proposal explains why permits are not needed.)

Task 1.3 Identify Required Permits

The objective of this task is to list all permits required for work completed under this contract.

Before any costs are incurred for which PIER reimbursement will be requested under this contract, the Contractor shall prepare and submit to the Commission Contract Manager a list of all permits required for construction and/or operation of equipment or the project facility, the name, address and telephone number of the permitting jurisdictions or lead agencies, and the schedule the Contractor will follow in applying for and obtaining these permits. If no permits are required to conduct this project, the Contractor shall state this finding in writing to the Commission Contract^o Manager.

Deliverables: List of all permits required for this project or statement that no permits are

equired.

Updated list of permits as they change during the contract term.

Task 1.4 Obtain Required Permits

The objective of this task is to obtain all required permits that will be required to complete work under this contract.

Before the Contractor is authorized to begin work on technical tasks of this contract, the Contractor must provide documentation that the Contractor has received all necessary and required permits to construct, operate, or test the proposed equipment or facility and that it is in compliance with all applicable laws, ordinances, regulations and standards. Permit expenses are not reimbursable through the contract; therefore, the PIER budget for this task will be zero dollars.

Deliverable: Written notification of receiving approved permits.

Key Personnel:

Key Subcontractors:

TASK 2.0 TECHNICAL TASKS

INSTRUCTIONS: first, insert all project-specific technical task numbers and titles here

Then, list only those tasks that would require a critical project review Lastly, after the Critical Project Review boilerplate description, provide an in-depth description of tasks and deliverables, key personnel, key subcontractors, and Critical Project Reviews using the format provided

The project s work scope involves the following technical tasks:

Examples only: TASK 2.1.0: (Title)

TASK 2.2.0: (*Title*) TASK 2.3.0: (*Title*) TASK 2.4.0: (*Title*) TASK 2.5.0: (*Title*)

Critical Project Reviews

The Commission will conduct critical project reviews at the conclusion of the following tasks:

Examples only to be completed by Commission Contract Manager

Subtask 2.2.2

Critical Project Reviews are meetings between the Contractor, the Commission Contract Manager and other individuals selected by the Commission Contract Manager to provide objective, technical support to the Commission. Meeting participants may include PIER Program Team Lead, Contracts Officer, Commission Technical Staff and Management. The purpose of these meetings is to discuss with the Contractor the status of the project and its progress toward achieving its goals and objectives. These meetings may take place either at the Energy Commission offices in Sacramento, or at another reasonable location determined by the Commission Contract Manager and the Contractor.

Before each Critical Project Review meeting, the Contractor shall provide the relevant task deliverable(s) to the Commission Contract Manager and any other designated reviewers sufficiently in advance to permit review of the deliverable document(s) before the review meeting. If not already defined in the Work Statement, the Commission Contract Manager shall specify the contents of the deliverable document(s).

At the Critical Project Review meeting, the Contractor shall present the required technical information and participate in a discussion about the project with the Commission Contract Manager and other meeting attendees, if any.

Following the Critical Project Review meeting, the Commission Contract Manager will determine whether the Contractor is complying satisfactorily with the Work Statement and whether the project is demonstrating sufficient progress toward achieving its goals and objectives to warrant continued PIER financial support for the project.

As an outcome of each Critical Project Review, the Commission Contract Manager will provide a written response within 10 working days to the Contractor indicating his or her conclusions about the project to date. The written response may include a requirement for the Contractor to revise one or more

deliverables that were included in the Critical Project Review. After each review, the Commission Contract Manager may reassess and reallocate the tasks, schedule, deliverables and budget for the remainder of the work including to not proceed with one or more tasks

If the Commission Contract Manager concludes that satisfactory progress is not being made, this conclusion will be referred to the Commission's Research, Development and Demonstration Policy Committee for its concurrence.

Technical Task Descriptions

The Contractor will perform the following technical tasks:

TASK 2.1.0

Description:

The goal of this task is to

Subtask 2.1.1

Objective: To

Activities: The Contractor shall

Deliverables: Report on

Key Personnel: Key Subcontractors:

Subtask 2.1.2

Objective: To

Activities: The Contractor shall

Deliverables:

Key Personnel:

Key Subcontractor:

| TASK 2.2.0: |
|--|
| Description: |
| The goal of this task is to . |
| Subtask 2.2.1 |
| Objective: To |
| Activities: Contractor will prepare The Commission Contract Manager will review and approve before |
| Deliverable: |
| Key Personnel: Key Subcontractors: |
| Subtask 2.2.2 |
| Objective: |
| Activities: Contractor shall |
| Deliverable: Report containing nonproprietary results of Data sets with proprietary information masked Report on project for Critical Project Review Key Personnel: Key Subcontractors: |
| CRITICAL PROJECT REVIEW MEETING |
| Task 2.3.0 |
| Description: |
| The goal of this task will |
| Subtask 2.3.1 |
| Objective: To develop |
| Activities: Contractor will The Commission Contract Manager will review and approve the |
| Deliverable: |
| Key Personnel: Key Subcontractors: |

Objective: To provide information on Activities: Contractor will conduct tests on **Deliverable:** Analysis Report of Tests on ... **Key Personnel**: **Key Subcontractors: Task 2.4** Subtask 2.4.1 Objective: To prepare Activities: Contractor shall ______. Deliverable: ______ without proprietary information. **Key Personnel: Key Subcontractors:** Subtask 2.4.2 **Objective: Activities**: **Deliverable**: **Key Personnel: Key Subcontractors:**

Subtask 2.3.2

TASK 3.0 REPORTING TASKS

All **public** reports shall be delivered to the Accounting Office address listed on Exhibit D.

All **confidential** reports shall be sealed and marked Confidential Deliverable and submitted to the Contracts Officer listed on Exhibit D.

3.1 Monthly Progress Reports

The objective of this task is to periodically verify that satisfactory and continued progress is made towards achieving the research objectives of this program.

The Contractor shall prepare a written Monthly Progress Report to the Commission Contract Manager by the 30th of each month, starting after contract execution and shall continue each following month until the Final Report has been accepted by the Commission Contract Manager. The Commission Contract Manager shall provide the format and content requirements for these reports. Attachment 1 provides the format and content requirements for these reports.

Deliverable: monthly progress reports

Key Personnel:

3.2 Final Report

The Final Report shall be a public document. If the Contractor has obtained confidential status from the Commission and will be preparing a confidential version of the Final Report as well, the Contractor shall perform the following tasks for both the public and confidential versions of the Final report. Attachment 2 provides the format and content requirements.

Subtask 3.2.1 Final Report Outline

Contractor shall prepare and submit to the Commission Contract Manager for review an outline of the Final Report describing the original purpose, approach and results of the project. The Commission Contract Manager shall provide the suggested format for this outline.

The outline shall be submitted to the Commission Contract Manager. The Commission Contract Manager shall review the outline and determine if it is satisfactory. If the Commission Contract Manager determines that the outline is unsatisfactory, the Contractor shall revise the outline until it meets the Commission Contract Manager s requirements, whereupon the Commission Contract Manager shall issue to Contractor a written approval of the outline.

Deliverable: Final Report Outline

Subtask 3.2.2 Draft Final Report for Comment

The Contractor shall prepare and submit to the Commission Contract Manager a draft Final Report on the project. The format of the report shall follow the outline approved by the Commission Contract Manager.

The Commission Contract Manager will review and provide approval or comments on the draft Final Report within 30 calendar days from receipt of the draft. If the Commission Contract Manager takes reasonable issue with the format or thoroughness of the draft Final Report, the Contractor and the

Commission Contract Manager shall in good faith discuss such issues and the Contractor shall take actions to address the Commission Contract Manager's concerns.

Deliverable: Draft Final Report

Subtask 3.2.3 Final Report

No later than 60 calendar days after receiving the Commission Contract Manager's written approval of the draft Final Report, Contractor shall make final corrections and changes to the Final Report. This task shall be deemed complete and accepted by the Commission only when the Commission Contract Manager approves the Final Report in writing. Upon approval, the Contractor shall submit two unbound copies of the Final Report to the Commission Contract Manager.

Deliverable: Final Report

Key Personnel:

Key Subcontractors:

Task 3.3 Final Meeting

A final meeting for contract closeout will be attended by, at a minimum, the Contractor and the Commission Contract Manager. The technical and administrative aspects of contract closeout will be discussed at the meeting which may be two separate meetings at the discretion of the Commission Contract Manager.

The technical portion of the meeting shall present findings, conclusions, and recommended next steps (if any) for the project. The Commission Contract Manager will determine the appropriate meeting participants.

The administrative portion of the meeting shall be a discussion with the Commission Contract Manager and the Contracts Officer about the following contract closeout items:

- What to do with any state-owned equipment (Options)
- Need to file UCC-1 form re: Commission s interest in patented technology
- Commission's request for specific generated data (not already provided in contract deliverables)
- Need to document Contractor's disclosure of subject inventions developed under the contract
- Surviving contract provisions, such as repayment provisions
- Final invoicing and release of retention

Deliverables: Meeting participation

Written documentation of meeting agreements and all pertinent information.

Key Personnel:

Key Subcontractors:

Attachment A-1 Content and Format of Monthly Progress Reports

General Guidelines

Each Monthly Progress Report describes the progress being made on all active tasks and subtasks. Progress is measured against the project/task/subtask objectives, schedule and budget in the contract. The primary purpose of this report is to keep the Commission's Contract Manager informed about the work -- to report on deliverables, budgets and schedules which may need to be adjusted or to report trends which may be cause for changing the direction of the research or for abandoning it altogether.

What is progress? Progress does not necessarily mean completing a task. Consider preparatory work, such as developing a test procedure or ordering equipment, as progress too. Even failure is progress. When you run into a blind alley, say so. When you have *tentative* results or conclusions, say they are tentative. All interim tasks, obstacles and problems are part of moving toward the final results, conclusions and recommendations. Overall, we are seeking *clear* results, which either prove or disprove a project/task/subtask basic hypothesis or theory.

Some repetition is inevitable and even desirable in progress reports. Monthly Progress Reports will be read by more than the Contract Manager and these other readers need a reminder of the purpose of the project/task/subtask and what happened the last time that progress was reported. The report should *briefly* bring them up to date on the why and what of the previous work, then focus on the current reporting period s progress, and lastly, *briefly* summarize anticipated future work.

Specific Directions

Please report on the status on a task-by-task basis. For each task, please indicate:

- What were the goals and objectives for the past month?
- Its work status: not initiated yet; % completed; or completed
- Are you ahead of schedule, on schedule or behind schedule?
- What specific progress have you made? If detailed, lengthy technical descriptions, tables and/or charts of work content are necessary to relay progress, please include these as attachments to the monthly progress report.
- Have you encountered any problems that will affect successful completion of the task? What actions have you taken to resolve the problem(s)?
- Have you discovered anything else that will materially change the objectives, course, cost or chance of the success? If so, what is it and what are its effects?
- What deliverables were due during this reporting period, if any? What deliverables are past due? What deliverables are due within the next reporting period?
- What are the plans for the upcoming quarter?
- Provide revised Exhibit B with updated schedule.

Progress Reporting Schedule

Submit the Monthly Progress Report within 30 days after the end of the reporting period. Begin reporting once the contract has been executed (approved by the Department of General Services).

| And, continue reporting until the Final Report has been approved by the Commission Contract Manager. |
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Attachment A-1, Cont d **Example of Monthly Progress Report**

MONTHLY PROGRESS REPORT September 1912

Project Title: Assessment of Iceberg Properties in Dynamic Response to Titanic Impacts

Project Period: 1 September 1912 through 30 September 1912

Lead Investigator: Larry Green, University of the West
Other Investigators: Mary Brown, University of the North

John Black, University of the South

Overview of Fiscal Status:

(See invoices for detail)

Summary of what we planned to accomplish this month.

[This is taken directly from the section on what we expect to accomplish during the next month from the last Monthly Report]

Summary of what we actually accomplished this month.

[Concise description of major activities and accomplishments.]

How we are doing compared to our plan.

[Explain the differences, if any, between the planned and the actual accomplishments. Describe what needs to be done, if anything, to get back on track.]

Significant problems or changes.

[Describe any significant technical or fiscal problems. Request approval for significant changes in work scope, revised milestone due dates, changes in key personnel assigned to the project, or reallocation of budget cost categories. If none, include the following statement: Progress and expenditures will result in project being completed on time and within budget.]

Related Market Transformation Activities

[Describe the status of all related market transformation activities that are linked to this project.]

PIER Buildings Programmatic Contract Linkages

[Describe the status of all collaboration achieved between this project, the LBL contract and the NBI contract.]

What we expect to accomplish during the next month.

[Concise description of major activities and accomplishments expected. This will be transferred to the next quarterly report]

Status of Milestones/Deliverables:

[This should be the complete list as contained in the revised scope of work and Exhibit B. Highlight differences between actual and planned.]

| Description | Start | Date Due Date | | Status (%) | |
|--|-----------------|----------------|----------------|---------------|---------------|
| Identify top 3 assessment candidates (Univ. North) | Planned 4/15/12 | Actual 4/15/12 | Planned 5/1/12 | Actual 5/1/12 | Done |
| Analyze experimental data (Univ. West) | 5/1/12 | 6/1/12 | 1/1/13 | 2/1/13 | Off track 25% |
| Submitted by: | | Accepted | l by: | | |
| | _ | | | | |
| Contractor Project Director | | Commiss | ion Contrac | ct Manage | er |

PIER Reports contain the following sections:

Cover Page and Title Page

Legal Notice

Acknowledgement Page

Table of Contents

Preface

Executive Summary

Abstract

Introduction

Project Approach

Project Outcomes

Conclusions and Recommendations

Endnotes

References

Glossary

Appendices

Attachments

Please contact Gary Klein, (916) 653-8555, gklein@energy.state.ca.us before starting your final report. He will explain the process and go over any questions you have. It is best if both the Contractor and the Commission Contract Manager participate in this discussion.

Please use the MS Office Suite for your final reports. The version currently in use at the Commission is ????? operating on Windows 95.

Cover Page and Title Page

Please create one page with the following information. It will be used to create the cover and title pages.

- Title of the Report
- Name of primary author(s) or principal investigator
- Author's company, organization or affiliation
- Location of author's company, organization or affiliation (City, State)
- Name of Energy Commission Project Manager
- PIER Program Area
- PIER Program Area Lead
- Contract Number
- Amount of Contract (Total including amendments.)
- Publication Number (Ask Susan Patterson, (916) 654-4992 for this number.)
- Publication Date (Month and Year)

Legal Notice

Use the following notice:

Legal Notice

This report was prepared as a result of work sponsored by the California Energy Commission (Commission, Energy Commission). It does not necessarily represent the views of the Commission, its employees, or the State of California. The Commission, the State of California, its employees, contractors, and subcontractors make no warranty, express or implied, and assume no legal liability for the information in this report; nor does any party represent that the use of this information will not infringe upon privately owned rights. This report has not been approved or disapproved by the Commission nor has the Commission passed upon the accuracy or adequacy of this information in this report.

NOTE: The abbreviation "CEC" is not allowed in final reports. Chose either Commission or Energy Commission throughout the report. Be consistent with one of the choices, and use it throughout the report.

Acknowledgement Page

Acknowledges or expresses appreciation to those who participated in the project. This may be a paragraph, or a list of names, and if appropriate their affiliations.

Table of Contents

| Sections t | o be | included | in the | Table of | Contents are | as follows: |
|------------|------|----------|--------|-----------|--------------|---------------|
| Sections t | | 11101000 | | I GOIO OI | Common and | , as ione ii. |

Preface

Executive Summary

Abstract

- 1. Introduction
 - Background and Overview (Why this project was necessary)
 - Project Objectives (What you planned to accomplish)
 - Report Organization
- 2. Project Approach (What you did to accomplish your objectives)
- 3. Project Outcomes (What happened)
- 4. Conclusions and Recommendations
 - Conclusions (What you learned from what happened)
 - Commercialization Potential
 - Recommendations (What you think should occur next)
 - Benefits to California

| Endnotes | |
|-----------------|--|
| References | |
| Glossary | |
| List of Figures | |
| List of Tables | |

Appendices
Attachments

Preface

Fill in the contract name, contract number, report title, organization, and research area, and numbers in the second to the last paragraph. Use the following Preface:

Preface

The Public Interest Energy Research (PIER) Program supports public interest energy research and development that will help improve the quality of life in California by bringing environmentally safe, affordable, and reliable energy services and products to the marketplace.

The PIER Program, managed by the California Energy Commission (Commission), annually awards up to \$62 million to conduct the most promising public interest energy research by partnering with Research, Development, and Demonstration (RD&D) organizations, including individuals, businesses, utilities, and public or private research institutions.

PIER funding efforts are focused on the following six RD&D program areas:

- Buildings End-Use Energy Efficiency
- Industrial/Agricultural/Water End-Use Energy Efficiency
- Renewable Energy
- Environmentally-Preferred Advanced Generation
- Energy-Related Environmental Research
- Strategic Energy Research.

What follows is the final report for the [Contract Name,] [Contract Number,] conducted by the [Company/Organization/Affiliation]. The report is entitled [Report Title]. This project contributes to the [PIER Program Area] program.

For more information on the PIER Program, please visit the Commission's Web site at: http://www.energy.ca.gov/research/index.html or contact the Commission's Publications Unit at 916-654-5200.

Executive Summary

A final report in miniature, containing all key information. Summarizes the introduction, purpose, project objectives, project outcomes, conclusions, recommendations and Benefits to California. It is intended to be short, bullet formatting is suggested. Assume a non-technical, management-level readership. If your project has more than one project, repeat this organization for each project area. The Executive Summary needs to summarize the report, not present new information found nowhere else in the document. Go the Commission web site for further examples.

Abstract

Limited to 250 words, essentially a very brief, Executive Summary. The Abstract covers the purpose, objectives, outcomes and conclusions. Contains 5-10 keywords for computer searches. Geared toward a more technical audience.

Introduction

- Background and Overview (Why this project was necessary) Provide relevant background, identify this project's subject area and the goals of this research. Refer to the contract for this information.
- Project Objectives (What you planned to accomplish) Present the technical and economic objectives
 for your project. The objectives need to contain the way(s) to measure or know the success of having
 reached the objective. These should be taken from the contract and should reflect any changes made
 during critical project reviews or at other times during the course of the project. (Describe why these
 changes were made in the Project Approach section.)

Each objective shall be separately identified, a useful form is:

Project objectives were to:

- Verify (an action verb followed by relevant text).
- Determine .
- Measure
- Report Organization Provides a roadmap to the rest of the report.

Project Approach

This section discusses the tasks you undertook and your approach to the research (What you did to accomplish your objectives). Discuss the testing procedures you undertook and the system modifications and improvements you made.

Project Outcomes

This is where you present your results (What happened). Organize this section so that results are presented in the same order as the objectives. A short version of each Outcome should be stated in bullet form. Supporting paragraphs that describe each Outcome should follow each bullet.

There can be more Outcomes than there were Objectives. For example, there may be more than one Outcome per Objective. It is also possible to have an unanticipated Outcome during your research. However, you can not have stranded objectives; all Objectives, whether met or not, must be discussed in this section. If this section is particularly long, then it is useful to create a summary at the end of this section where all of the bullets are drawn together as a summary.

Conclusions and Recommendations

- Conclusions (What you learned from what happened) Organize the Conclusions in the same order as
 Objectives and Outcomes. You may have Conclusions that are broader than individual Objectives and
 Outcomes. Please present these after you present the individual Conclusions. Conclusions must be
 drawn from evidence presented in the report.
- Commercialization Potential If your project had a task to prepare a Production Readiness Plan or a similar effort related to assessing where the research is in relationship to being used in its relevant markets (i.e. Stages and Gates), this is the place to discuss that task.
- Recommendations (What you think should occur next) Recommendations should derive from the Conclusions presented. Recommendations specific to individual Objectives, Outcomes and Conclusions should be presented in the original order. General Recommendations should follow.
- Benefits to California This section discussed two issues: (1) what benefits has California already
 received from this contract, if applicable, and (2) if this project is successful and the results widely
 used, how will California benefit. These benefits need to be related to the problems this research was
 intended to address. Refer to the Introduction section of the report.

Endnotes

Endnotes are preferred to footnotes.

Glossary

If there are more than 10 acronyms then a glossary with definitions for each acronym should be provided at the end of the report.

References

This is where you list all documents referred to in the body of the report. List references in standard bibliographic format. Be sure to check that shorthand references contained in the body of the report are accurate. Any documents referred to in the Appendices should be listed in the reference section in the appropriate Appendix.

Appendices

Designated by Roman numerals.

Attachments

If absolutely required, designated by Roman numerals.

Here is some additional guidance on how to ensure that the reports are technically accurate and internally consistent:

- 1. Put on the hat of an inquisitive, reasonably well-educated lay reader. Pretend that they just paid for this research project and they want to understand how and why you spent their money.
- 2. Apply the test of completeness. Are all the pieces there? Are all the references clear and do those in the text match those in the reference section? Are the relationships between the partners and the players clearly explained?
- 3. Apply the test of logic. Does the document flow and make sense? Is the need for the research clearly described? Is the technical approach clearly described? Do the conclusions make sense? Are they drawn from the analysis? Do the numbers check? Is it clear how the numbers were derived?
- 4. If the project didn t do everything it intended to do, explain.
- 5. **A)** Some research projects are Phase X of a longer term program and all work done during the time the Commission was involved was funded by all of the partners. **B)** In other cases, the work being done in this Phase of the program had more tasks than the Commission participated in, although some of the results of this work may have impacted, or been impacted by the other tasks. The Commission funded portion of the research project (or program) needs to be clearly differentiated from the overall program of which this portion of the research is a part. Comments about the program should not be intermingled with those about the project.
- 6. The objectives of the research project need to be clearly stated. The objectives of the Commission funded research project need to be clearly differentiated from the objectives of the overall program of which the research is a part. The objectives of the program should not be intermingled with the objectives of the project. If some objectives of the program will be performed elsewhere, or at another time, this needs to be explained. The report should then stay focused on the objectives of this project.
- 7. There needs to be a clear relationship between the objectives and the outcomes. The outcomes of the Commission funded research project need to be clearly differentiated from the outcomes of the overall program of which the research is a part. The outcomes of the program should not be intermingled with the outcomes of the project.
- 8. The methods used to conduct the research need to be explained.
- 9. Data that is presented in the report needs to be analyzed.
- 10. Each conclusion needs to be substantiated by the analysis contained in the report.
- 11. Figures and Tables must clearly relate to, and be consistent with the text, and vice versa. (If the text says the generator had a capacity of 30 kW, the table shouldn t say it was 31.2 kW.)
- 12. The text needs to clearly refer to the attached appendices. It should also explain how the data in the appendices matters to the text. If it doesn't really matter, it probably should be dropped. (You may still need it because it is a deliverable according to the contract, so check this carefully.) References to multi-page appendices need to be specific to the page or section of the appendix, not just a general reference to Appendix X.

Exhibit B TASK DELIVERABLES, SCHEDULE AND BUDGET

| Task Number | Task Name | Deliverable(s) | Planned Start Date | Planned Completion Date | PIER Task Budget | Match Budget |
|----------------|--------------------------------|---|-----------------------|----------------------------|---------------------|-----------------|
| | Project Start-Up Tasks | | | | | (Optional) |
| 1.1 | Attend Kick-off Meeting | Kick-Off Meeting | | | | |
| 1.2 | Document Match Funding | Cash/In-kind lists, commitment letters | | | | |
| 1.3 | Identify Required Permits | Permit plan or no permits required letter | | | | |
| 1.4 | Obtain required Permits | Documentation of permits issued | | | | |
| | | Project Start-Up Totals | | | | |
| | Technical Tasks | | | | | |
| 2.1 | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | Technical Tasks Totals | | | | |
| | Reporting Tasks | | | | | |
| 3.1 | Monthly Progress Reports | Monthly Progress Reports | | | | |
| 3.2 | Final Report | | | | | |
| 3.2.1 | Final Report Outline | Outline | | | | |
| 3.2.2 | Final Report Draft for Comment | Draft for Comment | | | | |
| 3.2.3 | Final Report | Final | | | | |
| 3.3 | Final Meeting | Meeting | | | | |
| | | Reporting Tasks Total | | | | |

| Total | |
|-------|--|

ATTACHMENT 8, Cont'd

Exhibit C Budget

| ☐ Overall budget, Emphasis |
|----------------------------|
| Prime Contract Budget |
| ☐ Subcontractor Budget |
| ☐ Match Budget |

| | | Personal | Services Operating Expenses | | Other | | | | | | |
|--------------------|------------------------------|-----------------|-----------------------------|-----------|------------|------------|------------|----------------------|-----------------|------------|-------|
| | | Direct Labor | Fringe Benefits | Materials | Equipment | Travel | Misc. | Indirect Overhead | G&A Overhead | Fee* | Total |
| | | Labor | Denents | Materials | Equipment | rravei | IVIISC. | Overnead | Overnead | гее | Total |
| | Project Start-Up Tasks | | | | | | | | | | |
| Task #1.1 Total | | | | | | | | | | | |
| Task #1.2 | | | | | | | | | | | |
| Total Task #1.3 | | | | | | | | | | | |
| Total | | | | | | | | | | | |
| Task #1.4 Total | | | | | | | | | | | |
| Task #1.5 | | | | | | | | | | | |
| Total Task #1.6 | | | | | | | | | | | |
| Total | | | | | | | | | | | |
| Task #1.7 Total | | | | | | | | | | | |
| TOLAI | B : | 20 | | | 40 | 20 | | | • | | *** |
| | Project Start-Up Totals | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | | \$0 |
| | Project Technical Activities | | | | | | | | | | |
| Task # Total | | | | | | | | | | | 0 |
| Task# | | | | | | | | | | | |
| Total Task # | | | | | | | | | | | 0 |
| Total Task # | | | | | | | | | | | 0 |
| Task # Total | | | | | | | | | | | 0 |
| TOLAI | Postant Tools deal O. Martel | #0 | # 0 | 40 | # 0 | # 0 | # 0 | ФО. | #0 | # 0 | |
| | Project Technical Subtotals | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Task # | Reporting Activities | | | | | | | | | | |
| Total | | | | | | | | | | | 0 |
| Task # Total | | | | | | | | | | | 0 |
| Task # | | | | | | | | | | | |
| Total | | | | | | | | | | | 0 |
| | Report Activity Subtotals | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | | \$0 |
| | | Direct | Fringe | | | | | Indirect | G&A | | |
| | 1 | Labor | Benefits | Materials | Equipment | Travel | Misc. | Overhead | Overhead | Fee | Total |
| | CEC-Reimbursable Totals | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| | | | | | | | | | | | |

Personal

Services

\$0

Operating

Expenses

\$0

Other

\$0

Total

\$0

^{*} Prime Contractor profit not allowed on subcontractor invoices.

Detailed Exhibit C, Budget, Instructions

Program Budget

Using the categories identified below, prepare four itemized Exhibits C, Budget, as follows:

- an overall PIER reimbursable budget by element, including all element costs
- a budget containing only the Prime Contractor's costs, identify DVBE's
- a budget containing only the subcontractors' costs, identify DVBE's
- a match funded budget which documents all other sources of funding, identify DVBE's

Use Attachment 8, Exhibit C, (Excel files) to prepare these budgets.

Budgets for Start-up Tasks and Reporting Activities

For the Administrative Element, the budgets itemized for the Project Start-up Tasks and the Reporting activities (using the Exhibit C form) should only include the efforts required for the Program Director and the administrative staff. On Exhibit C, under the Project Technical Activities heading, include the following:

- 1) Program Management and Administration;
- 2) Program Advisory Committee; and
- 3) Critical Program Review

The budgets itemized for each technical project (also using Exhibit C) should include the project lead and project staff efforts for the Project Start-up Tasks and Reporting Activities.

If the Commission eliminates a certain project out of the overall program proposal, the Commission will eliminate the project budget, as delineated in Exhibit C for that project. This will include both the Project Technical Activities as well as the Project Start-up Tasks and Reporting Activities for this particular project

1. Personal Services

Include projected increases in hourly rates & fringe to cover each year of the contract period

- Direct Labor, including hourly rates, hours, classifications/names
- Fringe Benefits, percentage and applicable classifications

2. Operating Expenses

- Materials--Identify those materials that are estimated to be over \$5,000 in value and dedicated to the program.
- Equipment--Identify each piece of equipment that is estimated to be over \$5,000 in value proposed for purchase using PIER funds. Please refer to Attachment 9, Contract Terms and Conditions, for restrictions that apply to the purchase of equipment with State funds. Subcontractors supplying equipment must be budgeted in the equipment category. We usually suggest that equipment be purchased with match funds.
- Travel--Identify all travel expenses for the program for which reimbursement will be sought. Indicate the number of trips to
 be taken and the destinations and estimated costs. Please see Attachment 9, Terms and Conditions for travel
 reimbursement rates.
- Miscellaneous expenses--Any expense not included in any of the other categories.

3. Other (attach audit documentation to verify rates)

You must include documentation in your cost proposal to support your General and Administrative rate and Overhead rate. If the Federal Defense Contracting Audit Agency (DCAA), any other governmental entity or private audit firm has audited and accepted your rates, please provide this documentation

- Indirect Overhead Rate -- list percentage, items covered and application to specific categories.
- General and Administrative Overhead Rate--list percentage, items covered and application to specific categories.
- Fee (profit) Rate -- list percentage, basis and application to specific categories. Profit cannot exceed 10%. The Prime Contractor is not allowed to add profit to subcontractor invoices.

4. Total Expenditures

• Sum of all the categories.

EXHIBIT C CONT'D

BUDGET Personal Services Hourly Rates and Benefits

Include projected increases in hourly rates and fringe to cover each year of the contract period. List each name/classification, hourly rate and fringe for the prime contractor. List each name/classification, hourly rate and fringe for the subcontractor(s). Use as many sheets as needed.

Rates for the period from ______ to _____

| Names/Classification-Title | Hourly Rate | Fringe % | Total Loaded Rate ¹ |
|------------------------------|-------------|-------------|-----------------------------------|
| Prime Contractor: | | | |
| | | | |
| | | | |
| | | | |
| Subcontractor(s) | | | |
| | | | |
| | | | |
| Rates for the period from to | | | |
| Prime Contractor | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| Subcontractor(s) | | | |
| | | | |
| | | | |

¹¹ Hourly rate plus fringe, overhead, G&A & profit as applicable

EXHIBIT C CONT'D

BUDGET OVERHEAD, GENERAL & ADMINISTRATIVE AND PROFIT RATES

| | Overhead | General and Administration | Profit |
|--|----------|----------------------------|--------|
| Percentages for each one | % | % | % |
| Rates for period from to | | | |
| Rates for period from to (Estimate) | | | |
| Rates for period from to (Estimate) | | | |
| Calculation Methods (formulas, e.g.: $X \times Z \times Y + Q = A$) | | | |
| For period from to | | | |
| For period from to(Estimate) | | | |
| For period from to (Estimate) | | | |
| List of items included in each fee: | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

EXHIBIT D LIST OF CONTACTS AND ADDRESSES

| Commission Contract Manager: | Contractor Project Manager: |
|--|------------------------------|
| , MS- | (Name) |
| California Energy Commission | (Contractor Name) |
| 1516 Ninth Street, 1 st Floor | Address |
| Sacramento, CA 95814 | Address |
| Phone | Phone: |
| Fax # | Fax: |
| e-mail: <u>@energy.state.ca.us</u> | e-mail |
| Commission Contract Officer: | Contractor Contract Officer: |
| Commission Contract Officer. | Contractor Contract Officer. |
| Judith Efhan, MS-18 | (Name) |
| California Energy Commission | (Contractor Name) |
| 1516 Ninth Street, 1 st Floor | Address |
| Sacramento, CA 95814 | Address |
| Phone: (916) 654-4397 | Phone: |
| Fax: (916) 654-4423 | Fax: |
| e-mail: jefhan@energy.state.ca.us | rax: e-mail |
| e-man. Jeman <u>(wenergy.state.ca.us</u> | e-man |
| Deliver confidential deliverables to this location only. | |
| Invoices, Progress Reports and Non-Confidential | |
| Deliverables to: | |
| Deliverables to. | |
| Accounting Office, MS-2 | |
| California Energy Commission | |
| 1516 Ninth Street, 1 st Floor | |
| Sacramento, CA 95814 | |
| Phone: 916-654-4402 | |
| Fax: 916-654- | |
| | |
| e-mail: jlee@energy.state.ca.us | |
| Legal Notices: | |
| Charul Paadal MS 18 | (aantraatar lagal nargan) |
| Cheryl Raedel, MS-18 Manager, Contracts Office | (contractor legal person) |
| © , | |
| California Energy Commission | |
| 1516 Ninth Street, 1 st Floor | |
| Sacramento, CA 95814 | |
| Phone: 916-654-4392 | |
| Fax: 916-654-4423 | |
| e-mail: <u>craedel@energy.state.ca.us</u> | Control to a V. Donos al |
| Key Subcontractors: | Contractor s Key Personnel: |
| (Common and and a common Civil 11 1 10 | (1 |
| (Company names and names of individuals if | (Individual s names listed) |
| they are key.) | |
| | |
| | |
| | |
| | |

EXHIBIT E PRE-EXISTING INTELLECTUAL PROPERTY

| For | Cor | poration |
|-----|-----|----------|
| | | |

| escription of property | Basis for its Proprietary Nature (Serial No./Patent No.) | | |
|--|---|--|--|
| nprovement ofProduction From Lignocellulose | Patent Pending (08/833,999-*) | | |
| 08/879,999-*) (note1) | Patent Pending | | |
| evelopment of High Resistant Escherichia Coli | Patent Pending (08/888,900-*) | | |
| ecombinant Uptake System | Patent Pending (08/777,222-*) | | |
| ecombinant Cells that Chromosomally Integrate Heterologous enes | Patent Pending (09/111,000-*) | | |
| terim Report to by | Trade Secret | | |
| applementary Results on batch hydrolysis of Sugar cane bagasse emicellulose | Trade Secret | | |
| lot Project for extraction and purification of taxanes(Final eport September 1997) | Trade secret | | |
| rocess for preparing a high purity chemical free cellulose form a | Patent Corporate Treaty Patent pending Canada -98 | | |

^{*} means Patent Pending and no assign Patent Number yet.

Note 1: Title of patent pending reveals significant business sensitive information . Title is being withheld until patent is issued. Serial Number identifies the item in question.

ATTACHMENT 9 FUEL CELL SYSTEM PERFORMANCE CHARACTERISTICS

Bidder fills in entries for all parameters relevant to the proposal. All entries in a column should be internally consistent. For "Commercial Product," list the year that the project will contribute to the introduction of systems in California.

| Parameter | Proposed Project | Commercial Product | Notes |
|------------------------|-------------------------|-----------------------|---|
| Year | | | |
| System Rating, | | | |
| Electric | | | |
| kW, dc | | | |
| kW, ac | | | |
| Thermal Output | | | |
| Flow (lb/hr) | | | |
| Quality (T, P) | | | |
| Efficiency | | | Natural Gas to electricity, |
| %, Electric, dc | | | LHV. |
| %, Electric, ac | | | At Peak Power Rating. |
| %, Thermal | | | |
| Turndown ratio | | | |
| Efficiency range, ac | | | |
| System Capital Cost | | | |
| FOB (\$/kW) | | | |
| Installed (\$/kW) | | | |
| Stack Replacement Cost | | | |
| (\$/kW) | | | |
| Replacement Interval | | | |
| O&M Cost (¢/kWh) | | | |
| Component Cost (\$/kW) | | | List for components being developed under project. Describe improvement level for "Commercial Product. |
| Emissions (lb/MWh) | | | |
| NOx | | | |
| CO | | | |
| UHC | | | |
| Noise (dB @ 10 feet) | | | |
| Stack Active Area | | | |
| (cm^2) | | | |
| Stack Operational | | | |
| Pressure (atm) | | | |
| Stack Degradation | | | |
| Rate (%/1000 hr) | | | |
| Stack Power Density | | | |
| (mW/cm^2) | | | |
| Stack Energy Density | | | |